SUMMARY

OF THE

IMPROVEMENTS AND DISCOVERIES

IN THE

MEDICAL SCIENCES.

ANATOMY AND PHYSIOLOGY.

1. *Action of Spirits upon Habitual Drunkards.* By Prof. C. H. SCHULTZ, of Berlin. There are two points into which this subject naturally divides itself:—1*st*, What is the nature of the action of ardent spirits on habitual drunkards? 2*d*, Why does not wine produce, equally with spirits, those morbid effects which are observed in the habitual drunkard?

Professor Schultz distinguishes between intoxication,—a merely temporary effect of ardent spirits, the result of their physiological and medical action in excess—and their pathological action, which shows itself in its highest degree in the production of delirium tremens. Intoxication is a brief excitement, and one, to a certain extent, normal, which ceases when the remote cause is removed; but tremors and delirium are the result of a morbid reaction, which continues for a long time after the cause has ceased to act. In investigating the nature of the morbid condition to which habitual spirit drinking gives rise, we must take no account of its short stimulating effect, which is rather the opposite of the disease produced by spirits, than its first stage.

Some writers have regarded this disease as an over-excitement of the nervous system, amounting almost to an inflammatory condition, but ending in exhaustion. Others have considered it to be the result of the direct action of spirits on the blood, and have regarded the nervous symptoms merely as secondary. The dark colour of the blood of drunkards, which several persons have noticed, favours the supposition, that some special change is produced in that fluid The causes, however, by which the colour of the blood may be modified are so various, that a mere knowledge of the fact that such a change occurs is not enough to solve any of the difficulties of the subject. The supposition that this change consists in an excess of hydrogen and carbon in the blood, is contradicted by the dissimilarity of the symptoms which intoxication produces, from those which result from respiring any of the narcotic gases. The analogy between the states of the blood under those two conditions is merely apparent, and has not been shown to exist in any point besides colour. Orfila and Renard have attached much importance to the chemical action of spirits on the mucous membrane of the intestines; alcohol coagulating albumen, but having in other respects an antiseptic property. It has been supposed, by the means of this property, to interfere with digestion; but this opinion is in many respects erroneous, for there is a great tendency to decomposition in the contents of the intestinal canal of habitual spirit drinkers.

Dr. Schultz is of opinion, that the primary action of ardent spirits is upon the organs of vegetative life. Two points connected with the subject have especially attracted his attention:—1*st*, The influence of ardent spirits on the bile, and its consequences. 2*d*, Their influence on the colouring matter of the blood, and on the envelope of the blood corpuscles.

If alcohol is added to bile, and the solution evaporated for a short time, the bile loses its alkaline reaction; it likewise ceases to be precipitated by vinegar, dilute sulphuric or muriatic acids, or by solutions of oxalic or phosphoric acids. The sour contents of the stomach of rabbits, dogs, and oxen, throws down no precipitate from the bile of oxen, when mixed with alcohol, and a long time is requisite for neutralizing the acid, while sometimes that change does not take place at all, if the bile and the alcohol have been long mixed together. This fact throws a new light on the disordered digestion of drunkards, and especially upon the generation of acid in the stomach, and the sour eructations to which they are so especially liable. But the bile is not only directly subservient to digestion, for it contains besides a number of excrementitious matters. In the healthy state these matters are got rid of by being precipitated in insoluble flocculi, which are then voided with the feces. The alcoholic solution of bile is not precipitated by acids, or by the contents of the stomach, or but very imperfectly, and consequently these excrementitious matters are retained in a state of solution in the intestinal canal, and become mixed with the chyle. The occurrence of jaundice, and many of the icteric symptoms to which drunkards are liable, may be partly explained, by supposing some of this morbid bile to become absorbed, and to enter the circulation.

It has long been known that a great part of the ardent spirits taken into the stomach, is absorbed unchanged, and that alcohol thus finds its way into the blood. Hitherto, however, persons have contented themselves with saying, that the blood has more of the characters of venous blood than natural, and they have not inquired which of the constituents of the fluid undergoes the morbid change. Professor Schultz has made the following experiments:—If a small quantity of spirit of wine is added to fresh blood, the fluid becomes transparent, and its natural colour changes to a cherry red, but it does not become blacker, as is commonly asserted. If the blood is now examined under the microscope, it will be seen that the colouring matter generally is changing its situation, and, instead of being contained in the blood corpuscles, becomes gradually diffused through the plasma. Thus, (if the alcohol is added to blood deprived of its fibrine,) in the course of a short time, instead of coloured corpuscles floating in a colourless plasma, the red plasma will be seen to contain colourless corpuscles. If the spirits are added to fresh blood capable of coagulating, the red plasma will form into a gelatiniform substance of the consistence of thick milk, and no separation into crassamentum and serum will afterwards take place. If half the quantity of spirit is added to the blood, coagulation of the plasma, or of the albumen of the serum, in cases where the blood has been deprived of its serum, at once takes place, and forms a mass of the consistence of cheese. These alterations are produced by injecting spirit into the veins of living animals, as well as by adding it to blood out of the body, and instant death of the animal takes place, although the change of the blood does not extend beyond that part of the venous system into which the injection is thrown.

The changes in the capsule of the blood globules, likewise merit attention. They lose their colour gradually, and contract more or less in size according to the quantity of alcohol added. In some instances, the blood corpuscles contract almost to a point, and become nearly undistinguishable, so that the blood appears to be a uniformly-transparent red fluid, without any globules. The newly-formed corpuscles undergo these changes most rapidly, while the alterations take place much more slowly in the larger globules, which contain more colouring matter.

The changes which the blood undergoes, are not directly chemical, for alcohol does not dissolve the colouring matter, but the corpuscles seem to lose it owing to their contraction. The constituents of the blood, then, are not actually decomposed, as was formerly imagined; but the results of the action of alcohol are not on that account less pernicious. The process of respiration is dependent on the normal condition of the blood corpuscles, since they are the media through which the mutual changes in the air and the blood are effected. The state of the colouring matter is also a point of great importance, as is evident from the striking changes which the air produces, and which are so marked that we look on the alteration of colour as the chief point of difference between venous and arterial blood. But both the contractibility of the blood globules and their contents, are greatly modified by the action of spirits on the blood. Thus we arrive at an explanation of the alterations in the respiratory process in habitual spirit drinkers, which result principally from the proper changes not taking place in the blood corpuscles and their contents. Less oxygen than natural is absorbed, hence less carbonic acid is exhaled, and the blood assumes a venous character, though one widely differing from that which the narcotic gases produce, since they produce a dilatation of the blood globules, and an accumulation of colouring matter within them.

From these alterations Professor Schultz deduces the various morbid conditions of the nutritive process incidental to spirit drinkers. The action of spirit on the nervous system is usually physiological, rather than pathological. Delirium tremens indeed is the result of a pathological process; not however of exhaustion consequent on over-irritation of the brain and nerves, but rather of a destruction of their excitability, owing to the morbid changes in the blood.—*Monthly Jour. Med. Sci.* Oct. 1841, from *Hufeland's Journal*, Apr. 1841.

2. *Pulse of Children at the Breast.*—M. Trousseau has inserted in the *Journ. des Connaissances, Méd. Chirurg.* an interesting memoir on this subject. He gives first an abstract of what MM. Billard, Valleix, and others, have written on the pulse of infants at the breast. From them we find, that before birth, and during pregnancy, the average of the pulse is 133 in the minute; that it falls to 83 at the moment that the child is expelled; and that in some minutes after it rises to 160. In the course of the first day it falls again to 127, and continues gradually to diminish during the ten first days, its average being then from 87 to 90 per minute. The above numbers are only the average formed, as the variations of the pulse are very great in the new-born infant. The following are the results which M. Trousseau has obtained. In infants from eight days to six months old, the average number of pulsations for boys was 131, and for girls 134; from six to twenty-one months, the average for boys was 113, and for girls 126; but along with the authors above cited, he found that the extremes were frequently far above or below the average.

The states of waking and sleeping have a much more sensible influence on the pulse than sex. M. Trousseau found, that in infants from fifteen days to six months old, the average of the pulse was 140 during waking, and 121 during sleep; and in infants from six to twenty-one months, 128 during waking, and 112 during sleep; and this difference is still more marked when the child is afraid, cries, or struggles, when the physician is feeling its pulse. In these cases, he has seen it rise from 112 to 160 and 180.

To sum up—the pulse of children at the breast varies from 100 to 150. After the first two months, it is a little more frequent in females than in males; and it is about 20 pulsations higher in a state of waking than it is during sleep.

The most important result of these researches is to show the impossibility of discovering a febrile state in infants, from the pulse alone.—*Journ. de Méd. et de Chirurg. Prat.*, Aug. 1841.

3. *Absence of the Uterus.* By Dr. Bertani.—Caroline Fossati, twenty years of age, when on the point of marriage, came to the hospital at Nular, to be treated for amenorrhœa. It was then ascertained that she had never menstruated, nor ever had had bloody discharge from any part of her body which could supply the place of that secretion. Upon examination, the labia and nymphæ were found to be well formed. The clitoris was somewhat small. The urethra was in its natural situation, and of its ordinary shape. Below it, the carunculæ were in the form of an ellipsis, and appeared to surround the orifice of the vagina. On separating them, the mucous membrane was seen to be continuous, and not dilatable, scarcely yielding when a sound was pushed against it. Upon introducing a finger into the rectum, and an instrument into the bladder, they were found to be

separated by no great thickness of parts. On examining all sides of the bladder with the sound, and depressing with the finger the abdominal parieties, no trace of a uterus or vagina could be detected.

The carriage and voice of Fossati were somewhat masculine. Her breasts began to appear at thirteen. There was hair on the pubes at fourteen; and at fifteen she had some abdominal pain in the loins and hypogastrium, which returned every month, but never with any discharge. Upon being told that she could not marry, she appeared not to suffer any grief. She had no sexual appetite. In other respects, her tastes and desires were feminine.—*Ibid.* Nov. 1841, from *Annali Univers. di Med.* 1841.

[Notices of analogous cases will be found in our Nos. for May, 1840, pp. 39 and 185; for Jan. 1841, p. 270, and for Ap. p. 348.]

4. *Monstrosities.*—1. M. Svitzer of Copenhagen has lately observed a fœtus, in which the small intestines were contained in a membranous dorsal sac. The vertebral canal was open, the posterior portions of the vertebræ being deficient. —*Müller's Archiv.* 1839.

2. The subject of this case was an infant which died on the ninth day. It was well formed, except that in place of eyes, there were two small oval globules, immovable and insensible. The anterior segments were only two lines in diameter. There was no nose, its place being occupied by two openings, separated by a membranous partition. No autopsy was permitted.—*Würtemb. Med. Cour.* vol. viii.

3. This child, a male, twelve weeks old, is still alive. In the umbilical region there is a cylindrical projection, an inch long and half as broad, and bearing at its extremity a pelvis and two extremities, with the genital organs. These are placed transversely on the infant. Urine is passed through both penes, but that from the smaller one is muddy, and sometimes milky. The latter appearance was remarked after the child had swallowed some milk.—*Müller's Archiv.* 1840.

4. Only four cases are on record in which both the inferior and superior extremities were wanting. M. Hulk of Dorpat has observed a fifth in the person of a girl fourteen years of age, of whom he has published a detailed description with a plate.—*Froriep's Notizen*, 1838.

5. M. Riecke has recorded a case of extrophy of the urinary bladder. The patient is a boy five and a half years old. The internal surface of the bladder is exposed, and the surfaces of the ureters are visible. The ossa pubis are ununited. The scrotum empty, the testes within the abdomen, and each inguinal canal occupied by a hernia. M. Riecke has constructed an apparatus to remedy the herniæ, and at the same time to protect the bladder from friction.—*Würtemb. Med. Corresp.* vol. viii.

6. The subject of this case lived only six hours. The cranium from the nasal spine to the occipital prominence, was deficient. The greater part of the encephalon was wanting, as were also the six first pairs of nerves, except a small vestige of an optic nerve on the left side. The first branch of the fifth pair and the six posterior pairs were present.—*Encyclographie Méd.* Aug. 1840, from *Casper's Wochenschrift.*

5. *Rotatory Movements of the Yolk in the Ovum of Mammalia, during its Passage through the Fallopian Tube.*—The attention of Prof. Bischoff of Heidelberg was called to this phenomenon by an observation of Dr. Martin Barry in the Philosophical Transactions for 1839. Dr. Barry there mentions having on one occasion met with an elliptical vesicle, (filled with a transparent fluid in which were small elliptical granules,) adherent to the mucous membrane of the Fallopian tube. In the centre of this vesicle was a mulberry-like body which continued rotating itself for half an hour, the rotation subsiding by degrees into a tremulous motion. Professor Bischoff was of opinion that this vesicle was an ovum and the rotating body its yolk, and he adduces an observation in corroboration of this supposition.

Having carefully laid open, with a pair of scissors, the Fallopian tubes of a rabbit, which had been placed with a male during the previous eight days, he found four ova close together about the middle of the tube of the left side. Within the zona pellucida of these ova was the yolk which, however, did not completely occupy its area, but between the yolk and the inner surface of the zona a transparent fluid intervened. In this fluid each yolk ball continually rotated on its own axis, in the direction from the uterus to the ovary. On examining the ova with a power of 800 diameters, the surface of the yolk was seen to be furnished with very minute ciliæ, by the vibration of which this movement was effected. Professor Bischoff convinced himself, by very careful examination, that the ova themselves remained perfectly still during the continuance of this rotatory motion of the yolk, which ceased on the preparation being moistened, in order to prevent the ova from drying up.

In this phenomena Professor Bischoff sees a fresh point of coincidence between the processes of developement in mammalia and in other animals, since similar rotatory movements of the yolk have been observed in the ova of mollusca and polyps, and recently by Von Siebold and Ehrenberg in those of medusa aurita.—*L. and E. Monthly Journ. Med. Sc.*, Oct. 1841, from *Müller's Archives*, Heft. 1, 1841.

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6. *Fibrin, Albumen, Casein, as Elements of Nutrition.* By Prof. Liebig.—These substances have this character in common, that they all comport themselves alike in regard to concentrated hydrochloric acid. They all dissolve in this acid with the aid of heat, and, kept for a time in a higher temperature, first assume a beautiful lilac, and then a rich violet blue colour. At this stage of the decomposition, each of the three substances reacts in the same way with carbonate of ammonia, and other reagents. Repeated analysis in the laboratory of Liebig, has in fact shown, that these three substances have the same elementary composition. The gases obtained by burning these substances with oxide of copper, consist in eight parts by volume of seven volumes of carbonic acid, and one volume azotic gas. The dried flesh of the ox, the deer, the cod and pike, and blood do not differ in composition. Extending our inquiries to the azotized articles of food consumed by phytivorous animals and man, vegetable fibrine (gluten), vegetable albumen, and vegetable casein (a substance which is contained abundantly in all the oily seeds), we find that these substances have precisely the same composition as the equivalent animal proximate principles; they consist of eight volumes, seven volumes being carbonic acid, and one volume nitrogen. There is therefore absolutely no difference between the azotized elements of nutrition made use of by the phytivorous and the carnivorous tribes of animals.

But a large proportion of substances used as food by phytivorous animals—sugar, gum, starch—contain no azote, and cannot minister to the formation of muscles, nerve, &c.—what purpose do they serve in the economy? They are in the first place, by the loss of an atom or so of oxygen, converted into fat, and the question now comes to be, what is the object of the fat which we see so generally accumulated among animals? At every period of life, man and animals are exposed to ceaseless causes of decay, through the influence of the air of the atmosphere. With every breath, man parts with a portion of his body; in every moment of his life he produces a quantity of carbonic acid, the carbon of which must be replaced by that which is contained in the articles consumed as food.

Now, if we observe an animal or a man in circumstances in which he takes no food; in the state of disease when the body is not renewed, when it has not that restored to it from without, which it loses in the course of its own vital processes, we see that the fat immediately begins to disappear; that the body wastes. The fat, in fact, escapes through the skin and from the lungs, in the shape of carbonic acid and water; we find no trace of it either in the feces or the urine; it serves as the means of withstanding the influence of the atmosphere; it serves for the defence of the various organs. With the disappearance of the fat, however, the influence of the atmosphere does not cease; the other soluble parts of the body replace the fat, and yield their carbon in the struggle. At length all resistance ends, death ensues, and, putrefaction commencing, all the parts of the body enter into combination with the oxygen of the atmosphere. In the greater number of the diseases that are called chronic, death follows through the influence of the atmosphere—through a want of resistance against the oxygen of the air. It is the carbon of the vital organs, of the nerves and cerebral mass in especial, that is expended in this direction. In the normal or healthy state, the carbon that is expended in the production of carbonic acid, must needs be derived from other sources.—*London and Edinburgh Monthly Journal of Medical Science*, Nov. 1841, from *Ann. der Chemie and Pharmacie*, Aug. 1841.

7. *On Milk.*—At the meeting of the *Acad. of Sciences*, on the 7th June, M. Donne communicated some observations on milk. Before the researches of the author, it was generally believed that milk is acid on being drawn from the breast; but M. Donné proved that the fresh milk of the human female, and of the female ass, is alkaline; as for the milk of the cow, some doubts still remained, because it is almost neutral, and has the curious property of both turning blue test-paper red, and of restoring the blue colour of paper that has been reddened by an acid. Sometimes, indeed, cow's milk is acid; we then discover by the microscope, that the milk-globules, instead of floating separately in the fluid, (as is the case in healthy milks,) are collected together in little masses, and it seems probable that this change depends on the commencing coagulation of the caseum. In a recent case where it was a matter of the utmost importance to obtain perfectly pure milk, the author found this alteration in the milk of a cow which had been selected for her healthy appearance. The milk was acid, and the globules agglomerated.

At the previous meeting M. Donné communicated the results of some experiments with milk, which he had performed on various animals. Milk of different qualities was injected into the vessels and great cavities of dogs, horses, goats, frogs, &c. Milk of good quality had no bad effect when mixed with the blood; while on the contrary, unwholesome milk gave rise to various accidents and sometimes occasioned death.—*Prov. Med. Journ.*, June 19, 1841.

8. *Composition of False Membranes*—M. Andral has clearly shown that the quantity of fibrin in the blood is increased during inflammation, and that the proportions of this substance bear a close relation to the different degrees and stages of the inflammatory affection with which it is connected. Some recent researches on the composition of false membranes, by M. Lassaigne, throw additional light on this interesting subject.

I have already (says M. Lassaigne) shown that the false membranes which are thrown out on mucous membranes in a high state of inflammation, are not composed of coagulated albumen, as many anatomists have supposed, but formed chiefly of a large proportion of fibrin, mixed with some soluble albumen, and moistened by a yellow coloured serum, containing all the organic and inorganic elements of the blood. I have, more recently, examined the false membrane in a pig labouring under pseudo-membranous angina, and obtained the same results. The false membranes, obtained from this source, were white with a yellowish tinge, slightly elastic and extensible. On submitting them to pressure I obtained a viscid yellowish fluid, which turned test-paper blue, and coagulated under the influence of heat and mineral acids.

A portion of the false membrane was frequently washed in cold water, to remove all the soluble matter; the residuum was a white substance, which presented all the physical and chemical characters of fibrin extracted from the blood. When digested with weak acetic acid, it becomes swollen, then transparent, and was entirely dissolved on the application of gentle heat. The solution, when saturated with caustic potass, threw down white flocci, which were again dissolved by an excess of the alkali. Concentrated sulphuric, nitric, muriatic acids, and the solution of the ferro-cyanuret of potassium, threw down a white precipitate, as they do with the acetic solution of fibrin.

The water, in which the false membranes were washed, was now evaporated, and there remained flocci of coagulated albumen; on continuing the evaporation, to dryness, there remained a saline residuum, composed of chloride of sodium, carbonate and lactate of soda, and a little phosphate of soda, salts which exist in solution in the serum of the blood.

From these facts we may conclude, 1st. That the false membranes thrown out by serous and mucous membranes in a state of inflammation, are principally composed of the fibrin of the blood. 2. That this principle, being separated from the circulating fluid, together with a small quantity of albumen, becomes organized, and thus gives rise to the morbid products alluded to.—*Ibid.*, from *Journal de Chimie, June*, 1840.

MATERIA MEDICA AND PHARMACY.

9. *Muriatic Acid contained in Narcotic Plants.*—Mr. Battley has directed attention to the large quantity of muriatic acid contained in those plants from which narcotic medicines are prepared. The following are given by him as examples:

			Dr.	Gr
28 lbs. of Fresh	Hemlock	contains of Muriatic Acid	5	3
Do. " "	Stramonium	" "	2	35
Do. " "	Henbane (1st year)	" "	1	59
Do. " "	do. (2nd year)	" "	1	5½
Do. " "	Nightshade	" "	1	4
Do. " "	Garden Lettuce	" "	0	43

Opium also contains some muriatic acid, but being an inspissated juice, cannot be compared with the recent plants.

10. *Preparation of Hydriodate of Potash Ointment.*—Messrs. T. and H. Smith of Edinburgh, having found it impossible to make a neat ointment of hydriodate of potash by the ordinary method, (rubbing down the salt in a mortar into a fine powder, and mixing it with axunge,) have resorted with success to the following method:—Dissolve the requisite quantity of hydriodate in its own weight of distilled or some perfumed water, and then mix thoroughly in the mortar with the proper quantity of lard. The two incorporate perfectly with a very little heating, and form a smooth ointment.—*London and Edinburgh Monthly Journ. Med. Sc.* Oct. 1841.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

11. *Essential Oil of Valerian, in Nervous and Hysterical Affections.*—Mr. W. R. Gore of Limerick, states that in as much as his own experience is concerned, he can say that the oil of valerian is a powerful remedy, to relieve or remove those functional derangements which arise from lesions of innervation, existing independent of organic alterations—when such states are unaccompanied by a partial or general plethora, and do not derive their existence from acute inflammation; and that its effects may be much increased by the judicious admixture of other appropriate remedies adapted to existing complications of derangement—as, for instance, its combination with the *citrated aromatic wine of iron* in chlorosis, accompanied with hysteria, or in any of those anæmic conditions of

organs or of the system, which so frequently give rise to complicated derangements of innervation, whether these arise from loss of blood, or from a primary defect in the process of sanguification.

On the other hand, where hysteric symptoms arise out of uterine or gastro-enteritic derangement of a *sthenic character*, or from any *similar* appreciable disturbance, such causes may be subdued by appropriate means, before the balance of harmony of the impaired functions be attempted to be restored, by valerian, or by tonics, or by any other means; and in this state the first proposed is a powerful means of accomplishing the end in view.

Again, there can be no doubt whatever but that when the secretions continue long impaired, from whatever form of organic disturbance, that the existence of this state is frequently the source of a reflex action on the nervous system, by which its functions continue disturbed, though the original cause may have long since subsided—and this would appear to be the result of the effects so produced upon the volume and character of the general circulation. In such a relation of things, the state of the secretions must, of course, be carefully attended to; and for the relief of the nervous disturbance, the valerian, I have cause to know, will accomplish its own part, more especially if assisted by judicious diet, appropriate exercise, and good air.

Mr. G. was called to the country to see a young lady, who laboured under many distressing nervous symptoms—disturbed rest, irregular bowels, impaired digestion, headaches, a partial palsy of the left arm, with nervous twitchings in the left side of the face, colicky pains across the abdomen, with much inflation of the bowels. Throughout the continuance of her illness the catamenia continued undisturbed. She was of a spare habit of body, and every indication of plethora absent. The dyspeptic symptoms were those which first called for attention, out of which, I conceived, the nervous disturbance arose; but long after her bowels became regular, the evacuations healthy, and the appetite good, *her nervous symptoms remaining unaltered*, she was subjected to the influence of electricity, and of the following mixture she took a small teaspoonful in half a tumbler of porter twice a day:—Rhubarb root, sliced, ʒiij.; Chirayeta, ʒij.; Coriander seeds, bruised, ʒiiss.; Bradishes' alkaline solution, ℥viii.

This was allowed to stand for ten days, and on being filtered, 16 drops of oil of valerian were added, which made a very good antacid, anti-spasmodic, tonic, aperient mixture, and from the use of which she derived most signal benefit. When this was out, all remedial measures were discontinued for a time. In consequence, however, of some existing nervousness, she was desirous of taking the valerian in the shape of pills, and the following mass was ordered her, one of which she took at bed hour every night.—Quininæ, ℈i.; Moschii, gr. i.; Pil. aloes comp. ʒss.; Ol. ess. valer. gutt. x. M. et divide in pil. xij.

From these she derived much benefit. They were again ordered, substituting ol. ess. carni. for the ol. valerinæ, in consequence of the latter being at that time a shilling a drop. The effects not being the same, she had to recur to the valerian, and in about six weeks all her symptoms subsided.

Mr. Gore says, that in the abdominal pains, and in that pain of the side peculiar to many young females, a combination of aloes, assafœtida, and oil of valerian, proves exceedingly advantageous.

I had one case of chorea, which after a little attention to the bowels, derived inestimable benefit from a single drop of the oil, in a lump of sugar, three times a day. After about three weeks this young woman was quite restored. It occurs to me that this would be a very suitable remedy to drop into a carious tooth accompanied with pain, where inflammation of the fang was absent, but having no opportunities to test this since the idea occurred to me, I can only give it as a suggestion.—*Dublin Medical Press*, Sept. 2, 1840.

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12. *On the Oxide of Silver.*—There is an extremely interesting article on this subject in the *Medico-Chirurgical Review* for July, 1840, by C. H. B. Lane, Esq. of which we shall give an abstract.

"The nitrate," Mr. Lane observes, "has been the form in which silver has been mostly employed; we owe it to alchymical research, which, though futile as to its immediate object, has had the beneficial result of affording us numerous powerful weapons wherewith to combat disease. As a local application it is in very general use; it acts chemically as a caustic, and is supposed to possess peculiar stimulant powers in addition, which opinion was originally advanced by Mr. Higginbottom; whose work is, I believe, the only English monograph on the subject which we possess. In the present day there has been some tacit acknowledgement of a contra-stimulant influence, but it is vague and undefined. I do not believe nitrate of silver to possess any stimulant action beyond that connected with its causticity: any destructive process tends to excitement if reaction takes place, and will be indicated by pain, that vigilant sentinel of our corporeal welfare. The action of silver I consider as directly sedative as that of lead, only differently evinced. While the primary sedative action of lead is on the nerves of animal life, perhaps that of silver is in special relation to those of organic life, by which the capillary circulation is believed to be governed—this refers to the primary effect, for once the constitution affected, the sedative impression is conveyed to the nervous centres, and the further results may be varied. We will take a case of morbid vascular action occurring in a cutaneous surface, with a view to contrast the respective therapeutic action of lead and silver. We find the application of acetate of lead attended by diminution of sensation, and if the surface be at all abraded, some degree of pain may ensue from the contact of the foreign body, as also from the stimulation of the free acetic acid. The continued application of the lead may annihilate the sensation of the part, and that safeguard of the surface being destroyed, organic life is but too readily arrested, an evil to be carefully avoided. Suppose, on the other hand, we apply the nitrate of silver to what is termed an inflamed surface. It acts primarily as a caustic, becoming decomposed and combining with albumen, first as a chloride, and subsequently as an oxide, constituting a foreign body which protects the surface from external impressions, a mechanical effect well described by Higginbottom; and this process is attended with more or less pain in proportion to the liability of the surface to impression either from abrasion or excited sensibility: slight organic action even may ensue, causing serous effusion. The excitement, however, generally quickly disappears, and a distinct therapeutic action is evinced. The morbid state, whether demonstrated in increased capillary circulation, secretion, or absorption, subsides; when the affection is local it is often quickly subdued. In the incipient stage of anthrax there is no local application which equals nitrate of silver in efficacy; in several cases where freely applied, I have seen it arrest the local mischief which there was every reason to suppose would have otherwise gone through the tedious process of sloughing—suppuration and ulceration—and this was what induced me first to suspect that more than mere stimulation took place. Looking at the medicinal influence of nitrate of silver in erysipelas, and various forms of ulcer, in which the existence of excitement to a greater or less extent cannot be denied, I think we shall be still further inclined to lay aside the theory of mere stimulation.

"The previous causticity of the lunar caustic is most advantageous in many cases, as for example, in the application to chancres and in chronic ophthalmia, where the destruction of morbid growth is desirable before there can be any susceptibility of sedative impression. There appears but little doubt that the application of nitrate of silver to syphilitic sores, if adopted while the affection is yet local, may preclude the necessity of constitutional remedies by destroying the centre of morbid action. Yet, on the other hand, the production of the sedative effect alone is often more advantageous, for where the organization is weak, the primary destructive causticity is badly borne, though, despite that inconvenience, nothing has been hitherto substituted which will as completely answer the purpose as lunar caustic carefully applied.

"The question now is—can the caustic stimulation be avoided, and a simple sedative action be instituted through the agency of silver?—to this I would reply in the affirmative! I would recommend the substitution of the oxide for the nitrate, which stands in the same relation thereto as the oxides of antimony and mercury do to tartar emetic and corrosive sublimate respectively. Thus we shall have a mild and manageable preparation—entirely devoid of causticity, which my brief experience leads me to hope will be found of high utility both as a local and internal medicament.

"I have applied an ointment of oxide of silver with decided effect in the various stages of gonorrhœa, and with but little inconvenience, beyond what might be fairly attributed to the mere mechanical irritation of the bougie. Over the nitrate it has the great advantage of not producing the caustic irritation by which, at the same time that the morbid secretion may be arrested by a process resembling tanning of the urethral lining membrane, there is considerable additional probability that metastasis of the irritation will ensue. The application of the oxide of silver, on the other hand, may be resorted to so as gradually to subdue the disease. I would not, however, by any means recommend its employment during the very acute stage while much constitutional irritation exists, and, subsequently, only as an auxiliary to the usual medicinal treatment. In chancres, I am convinced that I have seen the most beneficial results attend the application of the ointment. I have often found the sanative effect surprisingly accelerated after the failure of other remedies, and its use is not attended with pain. It is the oxide of silver which exists in Mr. Guthrie's black ointment, named by some "*infernal*," though far from violent in its action, and I believe available to a much greater extent than usually supposed. His formula consists of ten grains of nitrate of silver, fifteen drops of solution of lead, and a drachm of lard. The oxidization is effected by trituration and exposure to the atmosphere and light. A much readier mode of preparing it is from the oxide itself. The lead promotes sedative action but is not essential to it.

"We will now turn to the internal administration of silver. The use of the nitrate has been strongly recommended by many in nervous diseases of all kinds, and also in gastric affections, which are especially states of excitement, though of course constitutional debility may exist, as is often the case. With the strong conviction of the powerful sedative influence of silver used externally, I could not doubt that the result of its internal administration would correspond from analogy with lead, of which the powerful influence over the nervous centres is indisputable. With respect to the nitrate, the risk of cutaneous discoloration has always been a great objection to persistence in its use, when it was deemed requisite for any lengthened period. Now the nitrate is a soluble salt, which is changed by the free hydrochloric acid of the gastric juice into a chloride; this is taken into the circulation, and when conveyed to the cutaneous surface is converted by its strong affinity for albumen and by the action of light into an oxide, which, however, cannot apparently permeate the capillaries, or we might expect it to be removed at a future period, as is the bile in jaundice. The oxide of silver, however, remains indelibly fixed; nor am I aware of any recorded instance of its perfect reabsorption. Again, the nitrate cannot be administered freely on account of its causticity, so that a full sedative impression is not obtained, perhaps even when the mischief of discoloration is done. I think I have fair reason to expect that the above evils would be avoided by substituting the oxide for the nitrate of silver. The transmutation of the salt in the cutaneous surface would then be anticipated, and its transmission thereto prevented; for as I just remarked, the cutaneous capillaries do not appear permeable to the oxide. We should, by freer administration, more readily impart the sedative impression through the medium of the nerves of the stomach, like that of other medicines of the same class. It was suggested to me that the oxide would probably be decomposed by the free acid of the gastric juice, but, from experiments I have made, I do not anticipate such a result. Experience alone can test the truth of the theory—to that I appeal, and by it am willing to abide. If it be successful, I shall have the satisfaction of adding to our store a therapeutic agent of peculiar utility.

"The readiest mode of preparing the oxide of silver is by acting on the nitrate with potassa; we may remark that the gray nitrate of silver contains some portion of the oxide. The admixture of two drachms of the hydrate of potass with half an ounce of nitrate of silver will yield about three drachms of the substance in question. Its internal administration may generally commence in the dose of half a grain. I have not carried it beyond six grains in the twenty-four hours. I have used the ointment of oxide of silver with the proportion of from five to ten grains to the drachm of lard."

Mr. L. gives an abstract of thirty cases in which he has employed this preparation; in some successfully, in others with an opposite result.

Mr. L. concludes his paper with the following remarks:

"In relation to the above cases the following brief considerations may be advanced. The oxide of silver is entirely devoid of causticity, its local application occasioning no pain, a valuable fact in reference to its internal administration. The remedy appears beneficial in various nervous affections, when they have become idiopathic, that is to say, when the cause, whether originally seated in the stomach, uterus, spinal cord, or other viscus, is removed, and the impression alone remains behind. There are no cases in which the oxide of silver is so rapidly beneficial as in cases of idiopathic gastric irritation, whether evinced in pyrosis, gastrodynia, or want of relation between the stimulus of food and the action of the stomach; but if organic change have taken place in the organ, the same benefit is not to be anticipated. In obstinate diarrhœa and hemorrhages I am greatly in hopes that the silver will be found analogous in its action to lead—as efficacious, but milder and more manageable in its effect; this, however, requires much further trial. It would be unfair that the merits of the oxide of silver should be at all suffered to rest on its efficacy in epilepsy, of which we are well assured that the great majority of cases depend on organic change, which the medicine cannot influence. In reference to its utility in epileptic cases, all that can be said is, that if, as I consider, the oxide of silver will not produce a discoloring effect on the skin, the utmost advantage that can be expected from the dangerous administration of the nitrate may be safely and fearlessly attained by the substitution of the oxide."

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12. *Treatment of Chlorosis.*—A most grave error Dr. Ashwell conceives is too often committed, by considering chlorosis a local and not a constitutional disease; and ignorant practitioners, from the untimely use of drastics and emmenagogues, have, he remarks, yet further reduced the already enfeebled powers, and facilitated the advent of pulmonary disease. The author deplores, in common with every medical man of proper feeling, the prevalent faulty notions on the subject of physical female education, leading as they do to the production of so many serious and fatal diseases: he believes that, were these amended, chlorosis would become a rare disease. Alas! many, many yet must be the victims sacrificed at the shrines of fashion and folly, ere mothers learn prudence, or fathers compel the observance of the dictates of common sense.

Our first attention must be directed to the improvement of the state of the digestive organs, for, how shall we amend the deteriorated condition of the blood, until the organs of nutrition are in a fitting state for its elimination. But here a prudent hand must guide the means; our object is not to excite excessive purging, as a direct mode of cure, but to secure the due relief of the bowels by aloes and rhubarb, sulphate of soda and manna, and, where alteratives are required, the hyd. c. creta. Mild cordials should be combined with the aperients. Warm clothing, regular exercise, and, when the state of the appetite will permit, meat diet and mild malt drink, are to be recommended. If we succeed in improving the state of the digestive organs, the general vigour is in some degree restored, and the complexion partially cleared, but the catamenia are seldom by this alone induced. Now is the appropriate period for the administration of *iron*, especially the *sulphate*, while, had this remedy been employed prior to the due regulation of the secretions of the alimentary canal, the symptoms would have become aggravated, and not relieved. Its effect, when given judiciously, is sometimes magical. In some cases the subcarbonate is better borne, and occasionally other tonics, as quinine, sarsaparilla, zinc, &c. effect the purpose.

As to *Emmenagogues*, they are best employed when the pallor has become diminished, the bowels more regular, and the blood both more abundant and of richer quality. *Iron* (and especially the iodide, when the strumous diathesis is associated with chlorosis) is often alone a sufficient emmenagogue. The use of the mustard hip-bath, and of the local salt shower-bath across the loins, are excellent adjuvants. The injection of the vagina with the strong ammonia (liq. ammon. ʒj. lactis ℔j.) has proved useful in the hospital. Dr. A. has great doubts of the utility of applying leeches and cataplasms to the mammæ; he has often seen electricity useful. Travelling, with the change of scene and of habits it necessitates, as also a visit to chalybeate waters, and a sea voyage, have often cured chlorosis. The treatment requires to be early adopted, and most perseveringly continued, perhaps for months. As the cure progresses the diet should be improved, and the patient permitted to take mild ale or porter, or, if these are disagreeable, a little negus with her meals.—*Med. Chirurg. Rev.*, Jan. 1841.

13. *Use of Pitch in Piles.*—Dr. Wardleworth assures us, that he has used this remedy with advantage in many cases, both of external and internal piles. His usual formula consists in ordering 3½ grains of pitch to be made into pills, two of which are to be taken every evening. The well known efficacy of balsamic remedies in piles may perhaps serve to recommend these pitch pills.—*Med. Gaz.* 8th Jan., 1841.

14. *Treatment of Dysmenorrhœa.*—Dr. R. Chambers of Upton-on-Devon, claims to have met with uniform success in the treatment of Dysmenorrhœa by the following method:—

"When consulted by a person subject to this affection, I generally await the approach of the next attack before I adopt any curative treatment; and about four nights prior to its expected recurrence, I order from two to six leeches to be applied to each inguinal region, and, immediately on their falling off, direct the patient to be placed in a warm hip-bath for twenty minutes. These measures are repeated every night till the appearance of the menstrual discharge, and the following draught is administered every alternate day.

"Infusion of senna and camphor mixture, of each 8 drachms; sulphate of magnesia, 2 drachms; tincture of hyosciamus and tincture of colchicum, of each 10 drops.

"On the appearance of the menstrual discharge, the above measures are discontinued. Rest in the recumbent position is enjoined, and the following draught given every night and morning during the continuance of the pain.

"Muriate of morphia, one-quarter grain; tartar emetic wine, twenty-four drops; solution of acet. of ammonia, three drachms; spirit of nitrous æther, ten drops; cinnamon water, five drachms.

"In two days after the cessation of the discharge I begin the use of tonics; either the sulphates of zinc, quinine, or iron; the former I generally prefer, and I give it in doses of one-sixth of a grain, gradually increasing to one-half, three times a day. The pubis and sacrum are sponged night and morning with a lotion composed of vinegar and a saturated solution of common salt, in equal proportions; a flannel roller about ten inches in breadth is worn over the bowels; daily exercise is taken in the open air, on foot or on horseback; and the feet, when cold, are rubbed with warm flannel; this last, though apparently trivial, calls for particular attention; for the distressing sensation of weight so often complained of in the loins, no remedy is so effectual as the effusion of cold water from a height of two or three feet.

"In four cases complicated with menorrhagia, I employed the secale cornutum with marked advantage."

Mr. C. considers the immediate pathological condition of the uterus, when affected with dysmenorrhœa, to be one of congestion, and the pain to arise from the great determination of blood to an organ in a state of actual or relative debility. He does not deny the possibility of an inflammatory state of the uterus in some few cases, but he views dysmenorrhœa as arising more from constitutional peculiarity (plethora) than as a distinct disease, and scarcely thinks it entitled to a place in the arrangements of systematic writers.

Every circumstance connected with the disease appears to him to be opposed to the idea of its inflammatory nature; but the chief and great one is, its periodic return for years, without inducing a change of structure.—*Provincial Med. and Surg. Journ.*, 16th October, 1841.

15. *Beneficial effects of Narcotism in some obstinate cases of Neuralgia.*—M. Levrat read to the Academy of Medicine at their meeting of the 8th June last, a memoir on this subject. From the results of his long practice, it appears that opium given to the extent of producing narcotism often cures cases of neuralgia which have resisted the most varied and most active treatment. This mode of treatment may appear alarming at first, but when directed by a physician, who can watch the progress of the phenomena, regulate the administration of the drug, and combat its effects when excessive, it is not dangerous. Five cases successfully treated by this method were related.

16. *Remedies against Relapse in Intermittent Fever.*—In a case of intermittent fever, which yielded readily enough to the usual remedies, but always returned when these were given up, Dr. Kuntzmann of Berlin saw the disease effectually subdued by the exhibition of a table-spoonful of the powdered stem of the pumpkin, in half a table-spoonful of a tincture of wormwood. This dose was given every day at the same hour, and when indications of an approaching paroxysm were experienced. Dr. Osann says, that relapses of intermittent fever are best prevented by the use of the Tinct. Absinthii, which he has long been in the habit of prescribing, along with an equal quantity of the Tinct. Cinchon. Compos.—*Lond. and Edin. Monthly Journ. Med. Sci.* Nov. 1841, from *Hufeland's Journ.* June 1841.

17. *Treatment of Scrofulous affections by the preparations of Walnut Leaves.*—M. Negrier of Angers, has used the above remedy in seventeen scrofulous children, nine of whom had osseous enlargements with caries; seven ulcerated glands; one several swollen cervical glands with scrofulous ophthalmia of both eyes. Each patient took daily two or three cups of infusion of bruised walnut leaves sweetened with sugar or honey, and a four-grain pill of the extract of the leaves, or a spoonful of a syrup prepared with eight grains of the same extract to ten drachms of syrup. All the sores were washed with a strong decoction of the leaves, and covered with linen compresses steeped in this decoction, or poultices made with flour and the decoction. Seven of the patients were completely cured after six months of this treatment, and five nearly so; and M. Negrier concludes that the walnut leaves are superior to all other antiscrofulous remedies.—*Brit. and For. Med. Rev.* Oct. 1841, from *Bull. Gén. de Thérap.* May 1841.

18. *Electricity in Amenorrhœa.*—Dr. Golding Bird, in a highly interesting paper, on the use of electricity in various diseases, published in *Guy's Hospital Reports*, (Ap. 1841,) states that "scarcely any cases have been submitted to electrical treatment in which its sanatory influence has been so strongly marked as in those in which the menstrual function was deficient. The remarks previously made regarding the electrical treatment of chorea and paralysis alike apply to amenorrhœa: so long as the patient is seriously out of health, as when marked symptoms of chlorosis are present, scarcely the slightest benefit has ever resulted from the employment of electricity; in fact, as this agent can in these cases be regarded but as a local stimulant applied to an organ whose function is deficient, we could hardly expect the menstrual discharge to appear, when, from the deranged state of the general health, the womb is not in a state to supply the deficient secretion. The rule for insuring success in the great mass of cases of amenorrhœa is sufficiently simple:—improve the general health by exercise and tonics; remove the accumulations often present in the bowels by appropriate purgatives; and then a few electric shocks, often a single one, will be sufficient to produce menstruation, and at once to restore the previously deficient function. It is for want of attending to this rule that so many cases have been said to have been unsuccessfully treated by electricity; and to this statement I must oppose all the experience acquired from the cases treated in the electrical room of Guy's Hospital; for, with but one or two exceptions, every case in which the general health was not too severely deranged, as by chlorosis,

it has been successful; of course not including those who, from timidity or other causes, never appeared but once or twice at the hospital.

The mode of applying the electric shocks is the following. Let the patient be placed on a chair or stool; press the brass knob of a director against the sacrum; and if the stays be loosened, so that only the linen intervenes between the latter and the knob, no further exposure is necessary. A second director, furnished with a chain connected with the outside of an electric jar, is passed by the female attendant under the patient's dress, and the knob pressed against the pubes. The jar is then charged; and its ball touched by a third director, connected with the one held against the sacrum by means of a chain. The shock thus passes through the patient's pelvis; and should be repeated ten or a dozen times. The jar employed should hold about a quart, and be about half charged.

In general, whenever the menstrual discharge has appeared under influence of the electric treatment, I have directed the remedy to be intermitted as soon as the flow has been fairly established, and its use to be recommended about a week before its expected return.

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19. *Chronic Pleurisy—Paracentesis—cure.* By WM. DAVIDSON, M. D.—John Prentice, ætat. 40, an engineer, admitted into the Glasgow Royal Infirmary, on the 26th August 1840, was seized, about a fortnight before this date, with a slight rigor, pain in the left hypochondrium, increased on deep inspiration, or change of position. At present his decubitus is on the left side; he has a dry cough, accompanied with little or no expectoration; dyspnœa is urgent in the recumbent posture; there is anasarca of feet, legs, and abdomen, particularly in epigastric region, which is rather swollen and tympanitic, and there is considerable œdema of its integuments. Severe pain is felt on pressure over umbilicus; bowels are generally constipated; and he is troubled with borborygmi; pulse 80, weak; tongue foul; urine scanty. Percussion of left chest perfectly dull, that of right nearly natural; the former by measurement is found one inch and a quarter larger than the latter; the intercostal spaces are filled up, which give a more rounded appearance to the affected side, whilst the ribs are less elevated during inspiration. In left chest the respiratory sounds are only heard very faintly at the superior parts, and for a breadth of three inches along the spine, while in other regions they are inaudible. In right chest the respiration is puerile. The sounds and impulse of heart are normal, but the former are heard most distinctly at the right margin of sternum.

This patient was treated with calomel and opium, and diuretic powders, but as there was little prospect of doing him much good without an operation, after consultation, paracentesis was performed by Dr. A. Buchanan on the 29th, three days after his admission, by making an opening between the sixth and seventh ribs. Twenty pounds (apoth. weight) of serum were evacuated. It had a yellowish colour, was nearly transparent, adhesive, almost solidified by heat and nitric acid, and had a specific gravity of 1016.

30th August. Percussion is clear of left side of chest, both anteriorly and posteriorly, and bronchial respiration is heard loud in left back, but less so anteriorly. Breathing much easier, and patient can now lie on right side without inconvenience. Tympanitic distension of abdomen much diminished; bowels regular; urine scanty; pulse 84, small, soft; tongue whitish, moist; slight salivation. A few ounces of wine were ordered, and his pills and powders continued.

6th September. Percussion of left chest is clear, except in submammary and inferior dorsal regions, in which no respiratory sound is audible, but bronchial respiration is distinct above these parts. Impulse of heart is felt very distinctly in right submammary region, but is greatest at middle of sternum. Breathing easy; can lie without difficulty on right side; and both sides of chest measure the same, about two inches below nipples. Pulse 72, of moderate strength; considerable salivation; tongue reddish, dry in centre; wound was dressed to-day, and found adherent; urine four pounds; bowels rather open; swelling in epigastrium rather increased. A blister to the left side of chest was ordered, and a continuance of his medicines.

12th September. Percussion of left chest anteriorly clear, as far down as fourth rib, in the sitting posture, but in the recumbent, it is clear as far down as sixth, a similar difference being observed in the back by change of position. Bronchial respiration is heard as far down as nipples, but there is no murmur inferior to that point. Sounds of heart heard very loud at right margin of sternum. Percussion of back pretty clear to near the termination of scapular region, and at this last point an ægophonic sound is heard near spine, and very distinctly on his being made to read aloud. No respiratory sound is heard inferior to scapula; decubitus pretty easy on right side; pulse 84, moderate, rather soft; tongue tolerably clean, moist; mouth still sore; urine about four pounds. The blister was repeated to the chest, and the other medicines were continued until the 20th, when the pills were omitted on account of an increase in the salivation.

5th October. Two days ago a small grooved needle was inserted into the left pleural cavity, near the cicatrix of the former opening, and, a large cupping-glass being applied over it, forty ounces of reddish-coloured serum were drawn off. Yesterday a small trocar was inserted by Dr. Lawrie, and twelve pounds (apoth. wt.) of serum were drawn off by cupping-glasses. Percussion of the left chest anteriorly and posteriorly is pretty clear; respiratory murmur is heard, but somewhat indistinctly, even in superior regions; breathing much easier; sounds of heart rather less loud on right side; pulse 72, soft; tongue clean; bowels regular; urine one and a half pounds; serum reddish, deposits considerable portion of fibrine, and is of sp. gr. 1018.

9th October. Percussion of left side of chest tolerably clear, except in inferior dorsal region; that of right side somewhat tympanitic. There is bronchial respiration over the whole of left side, except in submammary and inferior dorsal regions. Impulse of heart greatest, and sounds loudest, at middle of sternum. At the top of left inferior dorsal region an ægophonic sound is heard. Respiration puerile on right side; breathing easy; pulse 80, of good strength; tongue clean; urine pretty copious; wounds in side are completely cicatrized. At this period he was allowed to leave the hospital for the purpose of seeing some relations, having promised to return in a week or two. This, however, he did not do, and I was informed that he died in four or five weeks afterwards.

Remarks.—In this case the symptoms of effusion into the left cavity of the chest were very decided, viz. the dull percussion, the increase of size as ascertained by measurement, more particularly as existing in the left side, the full and rounded shape of the intercostal spaces, the comparatively fixed state of the ribs during respiration, the decubitus on the affected side, the absence of respiratory sounds, the displacement of the heart, as indicated by its impulse and sounds being greatest at right margin of sternum, and the prominence of the epigastrium. The sign pointed out by Dr. Stokes was absent, viz. an increased or extended dulness on percussion over the sternum, when the patient's decubitus is on the sound side; but this arose, I am inclined to think, from the extreme distension of the pleural cavity, and from the fluid being in all positions under this bone.

The correspondence of the signs of percussion and auscultation, with the gradual reaccumulation of the fluid after the operation, is another point worthy of notice. On the day following the first operation, his breathing was easy even when his decubitus was on the sound side, the swelling of the epigastrium was much diminished, the percussion was clear all over, and bronchial respiration was heard in all the regions. Six days after this period, percussion was dull, and the respiratory murmur inaudible in the submammary and inferior dorsal regions, indicating the amount of fluid reaccumulated. This view is supported by the decubitus being still pretty easy on right side, by both sides having the same measurement, and by the less displacement of the heart, as indicated by its impulse at the middle of sternum. A few days later, viz. the 12th September, the dulness had increased as far up as the fourth rib, and the impulse of heart was greatest at right margin of sternum, indicating a progressive accumulation of the fluid, which continued to increase until the beginning of October, when the symptoms in almost every respect were similar to those he exhibited on his admission.

A third point in this case may be shortly adverted to, viz. the nature of the disease. Was it chronic pleurisy, or a modification of hydrothorax? The suddenness of the attack—the pain on inspiration—the rapid accumulation of the fluid—the absence of organic disease in the heart, liver, or kidney, favour the former opinion; while the serous and truly hydropic character of the fluid, accompanied with a tendency to anasarca, seem to favour the latter. Upon the whole, however, I am inclined to the opinion that it was the product of a low or subacute inflammation of the pleura, and hence it has been so named; although the arguments which might be brought forward to support this view, are not considered incontrovertible.

The operation for empyema is not very frequently performed, for on the one hand there are the difficulties of the diagnosis, and even when the signs are pretty clear, there may be some doubt about the state of the lung; and on the other, the danger of exciting a pleuritic inflammation. A plan, therefore, which may tend to remove or lessen any of these objections is worthy of consideration. The chief danger of the operation arises from the admission of air into the pleural cavity, and this cannot be avoided by the ordinary method, and if the stethoscope be applied to the chest during the evacuation of the fluid, atmospheric air can be heard entering its cavity with a noise similar to that produced by emptying a bottle nearly filled with water. To obviate this result, it occurred to me that the fluid might flow through the channel of a grooved needle, with the exhausted cupping-glass placed over it; this I accordingly tried, as stated in the report, and it succeeded perfectly, but the quantity of fluid being very great, it was necessary, in the second trial, to use a small trocar. One practical difficulty occurred with the canula, but not with the grooved needle, viz. its liability to slip from the opening, when the cupping-glass was applied, which is obviated by previously tying it around the chest by a piece of narrow and very thin ribbon. The cupping-glass employed was curved, and capable of containing about two pounds of fluid, and it was exhausted by a piece of ignited lint, which had previously been dipped in alcohol. Very little air, as far as could be ascertained, entered the pleural cavity, and it is a good practical rule to hold the finger over the mouth of the canula, during the changing of the glasses, which ought to be frequently done, as it lessens the duration of the operation, by causing the fluid to flow in a full stream, whereas, without the aid of an exhausted cupping-glass, it would do so very slowly. The same plan of operation I have frequently adopted in opening chronic abscesses, even in the knee-joint, without any subsequent irritative fever or inflammation, and in one or two cases, even in cachectic constitutions, there has been no reaccumulation of matter, when firm bandaging was afterwards had recourse to.—*Lond. and Edin. Monthly Journ. of Med. Sci.*, Nov. 1841.

20. *Evolution of Tubercle.*—Dr. C. Haller has had ample opportunity of observing the various forms in which tubercles in the lungs are evolved, in the House of Correction, Vienna, where phthisis is extremely common, "where *lung-tuberculosis* is endemic," as the author says. Here, as everywhere else, the most common of all the forms of tubercular development in the lungs, is, 1st, that of a *bronchial catarrh*, or seemingly simple cough, with or without febrile symptoms, and accompanied either with very little or no expectoration; 2d, often the disease commenced in the guise of *pneumonia;* 3d, still more frequently it assumed the appearance of a common continued fever; and, 4th, in rare instances it presented itself with the perfect tertian or quotidian intermittent type.

The first form is sufficiently well known—description has been exhausted in regard to it. But the form in which pneumonia is simulated has attracted less attention. Here violent fever, with great dyspnœa, or rather breathlessness, a sensation as if a load lay upon the breast, without much or any positive pain referred to a particular spot, distressing and almost dry cough attacking in fits, violent action of the heart, with an accelerated, hard, and often irregular pulse, a burning skin, great sense of depression, and rapid sinking—all the symptoms, in short, indicating acute pneumonia; but this diagnosis is not borne out by the information conveyed by auscultation and percussion. The chest sounds well everywhere; it is even tympanitic in its tone. The respiratory murmur is appreciable at every part, only somewhat rough, with occasional small, but, by degrees, increasing, mucous rattle; in a word, auscultation and percussion lead only to negative results. The symptoms continue for several days unabated either by blood-letting or the treatment generally followed under the same circumstances, and, so far as symptoms are concerned, with success; though, if the exudation of tubercular matter be extensive, the patient may be lost within from a week to a fortnight. If the tubercular exudation have been limited to the upper part of the lungs, the symptoms are less severe, and there is less immediate and apparent danger; the dyspnœa becomes less by degrees, the cough becomes moister, but the febrile state continues long, and, when it ends, it is without a crisis of any kind. The little relief procured by blood-letting, the great amount of dyspnœa, the slight indications of inflammation presented by the blood that is abstracted, the negative results of auscultation, the pertinacity of the fever, and the want of critical phenomena, particularly by urine, suffice to distinguish this disease from true pneumonia.

From proper typhus fever the diagnosis of tubercular formation is more difficult. But the disease in this case is always preceded for a long time by a greater or less amount of indisposition. The patient feels an extraordinary degree of languor, and has an extremely irritable and variable pulse; the heart and vascular system are greatly excited without any apparently sufficient reason, inasmuch as no organ in especial seems to suffer. Nervous symptoms are, at the same time, manifested; confusion of thought, rambling talk in the night, dry tongue, burning thirst, hot dry skin, trembling of the extremities,—the symptoms, in a word, are those that usher in an attack of common continued fever; but they do not increase in intensity, and after about a fortnight, the patient begins to hack and cough; the nervous symptoms abate, and now it becomes obvious that he is labouring under a serious affection of the chest, which, in the event of the tubercular exudation, which is its element, having been extensive, carries him off in the course of a few weeks in what is called a *galloping consumption.*

Dr. Haller also observes the primary formation of tubercle to take place upon several occasions, along with symptoms of the well-marked intermittent febrile type. But as the qualities of air and soil that give diseases an intermitting character are wanting in this country, we shall not follow the writer here.

With his excellent opportunities of observing incipient tuberculosis, Dr. Haller is enabled from certain signs to perceive the disease before it appears, and when it is only threatened. These signs are mental and corporeal. Those who are about to become the victims of tuberculation of the lung, are either greatly depressed and miserable, or they show a singular irritability and changeableness of disposition. The sleep is generally disturbed by distressing dreams. The subject of observation loses his healthy look, and gets thin; sometimes the appetite is increased, sometimes it is greatly diminished; the digestion is imperfect, the bowels are moved more frequently, and the evacuations are larger than usual. Frequently the most remarkable symptoms are referable to disturbance of the circulation; there are symptoms of determination to the head, vertigo, headache, now and then epistaxis, and the individual is subject to change colour constantly; there are symptoms of congestion about the chest, a passing sense of oppression, some cough, perhaps slight hæmoptysis, though this occurs for the most part at a subsequent period; palpitation readily excited, and so obstinate as often to cause suspicions of organic diseases of the heart; indeed, it is only by the use of the stethoscope that the true state of affairs can be discovered.—*Ibid.* from *Med. Jahrb. des Œsterreich. Staates,* July, 1841.

21. *The use of Opium in Acute Internal Inflammations.* By ROBERT CHRISTISON, M. D., Professor of Materia Medica in the University of Edinburgh.—1. The varieties of internal inflammation which best exemplify this action of opium, when given singly, are the inflammations of the mucous membranes. Of such diseases there are at least four which may often be thus successfully treated without almost any other remedy, namely,—coryza, catarrh, influenza, and dysentery.

As to *Coryza*,—most persons on feeling its approach, are content to submit without a struggle to the infliction, and eschewing alike physic and the physician, let their "cold in the head" take its own way. But few would do so, were they aware how easily and how agreeably so tormenting a visitor may for the most part be got rid of. For twenty years I have been accustomed to see it stopped at once by a full opiate given on the first day of its appearance. Let the patient avoid food after dinner, use liquids sparingly, take a full dose of muriate of morphia, or Battley's solution, at bedtime, and breakfast before getting up next morning,—and he will then commonly find the secretion of the nostrils permanently inspissated, and the complaint either gone entirely, or at any rate no longer a source of particular annoyance.

During the same period, I have often seen a common *catarrh without fever* cut short in like manner, if taken on the first, second, or perhaps even the third day. Or more generally it seems to pass at once over the intervening stages to that in which thick sputa are coughed or hawked up without labour, and without irritation in the chest or windpipe. *Febrile catarrh* too may be checked abruptly in the same way, if patient and physician are lucky enough to meet during the first or the second day at farthest. But here probably the next mode of employing opium is fully more successful. I have also repeatedly seen epidemic *influenza* thus checked at the outset,—the local inflammation vanishing, while the strange lassitude, listlessness, and ennui, so characteristic of this disorder, went on as usual for some days during convalescence.

Although an authority so recent and so eminent as Mr. Pereira states, that "in *dysentery*, opium can only be used beneficially in the latter stages, and then with great caution" (*Mat. Med.* 1303); this is another and more formidable malady, which, if I mistake not, may be added to the mucous inflammations capable of being cut short in the early stage by opium. I doubt whether Mr. Pereira's doctrine will be received at all as a general proposition. There is not a better way of treating an ordinary mild dysentery at the commencement, than by the familiar practice of alternate opiates and laxatives. But,—what is more connected with the matter now chiefly under review,—in severe epidemic dysentery, as it occurs at times in this country, the cure when early begun, may be commonly trusted, if I may rely on my own experience, to opium alone,—not used, however, "with great caution," but given boldly and often.

2. The method of using opium along with ipecacuan as a sedative anodyne, and sudorific, in the early stage of acute inflammations, is probably applicable to a considerable number of diseases of the kind. Those alone in which I have employed it are common sore throat, catarrh, and acute rheumatism.

From frequent observation, I am inclined to think that there are few cases of *acute cynanche tonsillaris*, which may not be cut short at the outset by this treatment, if they are subjected to it about the close of the first, or at all events before the close of the second day. Of several instances I have met with to this effect, the following are examples. A lady, rather subject to febrile cynanche tonsillaris, was attacked with rigors in the evening, and sore throat during the night. Next day the right tonsil was much enlarged and red, and the posterior palate and velum red and thickened,—the pulse at the same time being one hundred and twenty, and sharp, and the febrile oppression considerable. In the evening, and therefore within the first twenty-four hours, ten grains of Dover's powder were given at intervals of half an hour, till half a drachm was taken. Perspiration, which soon broke out gently, was kept up for fifteen hours by warm drink. In twenty hours after the powders were taken, the pulse was seventy, the pain in swallowing gone, and the swelling and redness insignificant; and on the subsequent morning she was able to leave her bed. This attack happened eight years ago at least, and the disease has not returned since.—A lady about thirty-eight, long a martyr to cynanche tonsillaris,—which, in particular for three years before, had returned during the winter, ended in abscess of one or both tonsils, occasioned great and protracted torture, and had left chronic enlargement of these glands,—was attacked in the same way for the fourth time. When I first saw her on the fourth day of the disease, the tonsils, greatly enlarged, especially on the left side, blocked up nearly the whole throat. She spoke with much difficulty, could not swallow without long, painful, and repeated efforts, and breathed noisily and with labour. The pulse was one hundred and sixteen, full and soft. The febrile oppression and anxiety were great. A large blister had been applied to the throat, and purgatives taken freely, but without the slightest benefit. The attack seemed too far advanced to be arrested. But as fluctuation could not be detected in the larger tonsil, Dover's powder was ordered as in the former case. Sweating ensued; ere long, warm drink could be swallowed with no great difficulty: and when the perspiration had thus been kept up for twenty-four hours, the pulse had fallen to sixty-four, the swelling of both tonsils had materially subsided, and the febrile anxiety had ceased, together with the local uneasiness in a great measure. In two days more there was little complaint left except weakness. In the course of time, the chronic enlargement of the tonsils disappeared; and this lady, like the last, has never had another attack, though five years have elapsed since the one now described. The tendency to cynanche tonsillaris, certainly seems to grow with its repetition in a severe form; and I have met with other instances besides these two, where an abrupt early cure seemed to break both the attack and the liability. The only objection, or rather obstacle, to this plan of cure is, that patients unluckily will seldom put themselves in the way of profiting by it; as the practitioner does not often see febrile sore throat, till the chief question he has to consider under the head of treatment is, whether an abscess in the tonsil is to be opened by nature or the lancet.

I have seen *febrile catarrh* quickly arrested in the same way in persons prone to it. But the circumstances have been so similar to those just described, that a detail of them here seems unnecessary.

Whether *acute rheumatism* may be also treated successfully by the like means, is a matter of doubt. At the period at which medical men generally first come in contact with a case of it, sweating by Dover's powder will not succeed singly. But this is a powerful and speedy measure, if immediately preceded by general blood-letting. Perhaps, then, the present topic would be better deferred, and taken up under the next head. But since it is the action of opium as a sudorific, which seems here the source of its curative influence, while in the third mode of using it for arresting acute inflammatory diseases this kind of action is not at all essential, the treatment of rheumatism will be more conveniently disposed of in the present place.

There are physicians of undoubted authority, who maintain the acute rheumatism can scarcely be cut short,—that, do what one may, the patient must endure towards three weeks of agony, and three weeks more of stiffness, weakness, and occasional aches. I am convinced, however, that, at least in young adults of sound constitution, a genuine acute attack may often be put an end to in a few days, by first drawing blood very freely to the approach of faintness, and then giving Dover's powder instantly afterwards in the way mentioned above for inflammatory sore throat. I have often observed, that after sweating has been thus brought out and kept steadily up for thirty-six or forty-eight hours, the pulse fell to the natural standard from nearly double that rate, the white thickly-furred tongue began to clean, the pains and redness gave place to numbness and want of power, recovery went on afterwards swiftly and without interruption, and the patient was able to leave his bed in a week. The chief conditions for success are, that the bowels, previously opened if necessary, shall be let alone till the sweating is well over; that blood be drawn both largely and to approaching syncope; that the powders be given immediately afterwards, before the circulation recovers its state of excitement, which it will otherwise soon do; that the treatment shall be enforced before the close of the fourth day, but earlier if possible; and that the case shall be real acute rheumatism, not one of the subacute form or gouty rheumatism, as it is called. Where for some days previously the local inflammation has been shifting from joint to joint, with irregularly intermitting fever, I have once or twice tried to do without the preliminary blood-letting, but have not succeeded. In one instance, that of a stout young cabinet-maker, copious sweating begun on the third day without blood-letting, and maintained for eight-and-forty hours, was of no avail; but when repeated after one free evacuation of blood, it put an end to the disease abruptly in the way just described.

3. The treatment of acute internal inflammations by opium after blood-letting is now currently used by some practitioners. But since, notwithstanding its efficacy, it is still not generally practised, it seems to need the support of farther testimony than it has yet received from the few who have taken public notice of it.

This mode of cure consists in withdrawing blood very freely from the arm till faintness approaches, just as in the ordinary way of treating acute inflammations,—and then giving a large opiate, with a view to bring on sleep or the calm reverie which in some people takes the place of sleep. The result is, that, on the patient awaking, the general fever and local inflammation are found to be subdued and broken,—generally at once, but sometimes not till the repetition of the practice in twelve or twenty-four hours.

The conditions for successfully employing opium after blood-letting are nearly the same with those for using Dover's powder in rheumatism. It is essential that the disease to be subdued be in its early stage; that a deep impression be made on it by blood being withdrawn both freely, and to the approach of faintness; and that the opium be given largely and immediately, so as to anticipate the renewal of reaction. Sweating sometimes ensues, but is not at all a necessary condition for success. The particular preparation of opium to be used, is perhaps of no great consequence. I prefer the solution of muriate of morphia, or, failing that, the sedative solution of Battley. The dose of the former should not be less than forty minims, for an adult male, and for others in proportion; and the dose of Battley's solution, which is certainly not so strong as its maker represents, should not be less than twenty-five or thirty minims. Some conceive this treatment applicable only to inflammation of membranous surfaces, not to that of parenchymatous textures. I do not know any positive facts either on one side or the other of this question; but the statement is doubtful, if it be meant to apply to acute parenchymatous inflammations in their early stage. If pneumonia be regarded as inflammation of a parenchymatous tissue,—which, although a common mode of viewing it, is rather incorrect,—then, there can be no doubt that in this particular instance the treatment is most effectual on many occasions.—*Braithwaite's Retrospect Pract. Med. and Surg.* No. 3, from *Edin. Monthly Jour. of Med. Sci.* Feb. 1841.

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22. *Successful employment of large doses of the Iodide of Potassium in the last stage of Acute Hydrocephalus.*—Dr. Roeser, of Bartenstein in Wurtemburg, advocates the employment of the iodide of potassium in large doses in cases where the ordinary remedies have failed, where paralysis has already occurred, and death appears impending. It has been administered in earlier stages of the disease, and in small doses, by other physicians. His prescription for a child two years and a half old was:—

℞.—Hydriod. Potassæ . . ʒj.
Aquæ Distill. . . . . . ℥ss.—Misce.

Thirty drops to be given every hour in a glass of water.

This was continued for a week, and then for four days more, half the quantity was given. When the use of the medicine was begun, the child had been affected six days, with symptoms of hydrocephalus, for which leeches were applied to the temples, cold to the head, and calomel was given in large and frequently-repeated doses, without any amendment. On February 12, 1840, the child lay insensible, with pupils fixed and dilated, complete paralysis of the right side, and frequent automatic movements of the left leg and arm. The face was flushed, the body bathed in perspiration, the pulse frequent, and deglutition was accomplished with difficulty. The iodide of potassium was now given as above, and within twenty-four hours a drachm of the medicine had been administered without any preceptible change. On the 14th, it was noticed that the pupils, before much dilated, had become contracted; on the 15th, the plaintive hydrocephalic cry was less frequent, the pupils were neither contracted nor dilated, and the bowels had acted copiously. On the 21st, the child gave evident signs of consciousness, the pupils acted regularly, and the face had an air of cheerfulnes. The patient began to move the left arm and left leg, which had lain motionless for a week, when the automatic movements ceased. Paralysis of the right side, however, continued until the 23d. The iodide of potassium was discontinued on February 21st. A crop of boils now formed on various parts of the body, notwithstanding which, the child continued to recover. In May, it had regained its flesh, was cheerful, and very intelligent.—*Lond. and Ed. Monthly Journ. Med. Sci.*, from *Hufeland's Journal*, April, 1840.

23. *Prevention of Tubercles.*—M. Coster has submitted several animals to various experiments, for the purpose of determining how far the formation of tubercles may be prevented by diet, but principally by the administration of medicines with their food. Some rabbits were fed in the open air, and in the usual manner; another set were shut up in narrow boxes, in a cold moist place, and deprived of light, air, &c.; they were fed on potatoes, turnips, &c. A third set were placed in the same circumstances as the latter, and nourished in the same way, but they were given every second day some bread containing nine grains of the carbonate of iron. The animals were killed after the lapse of five months. The first set were healthy; the second set had tubercles in the lungs or other parts of the body; while the third set remained completely free from any trace of tubercle. M. Coster assures us that he has performed similar experiments on dogs, chickens, &c., and invariably found that the bread containing iron prevented the formation of tubercles.—*Provincial Med. and Surg. Jour.* June 12, 1841, from *Bull. de l'Acad.* No. 13.

24. *Treatment of Chlorosis by Chalybeate Bread.*—Chalybeate bread (i. e. bread containing a salt of iron) has been administered in one of the largest hospitals in Paris to chlorotic patients, and with the best effects. Last year seven females were treated in this way; five of them laboured under a very severe form of chlorosis, and were cured within a month, the others left the hospital well in a fortnight. From four to five grains of the lactate of iron may be mixed with every three and a half ounces of bread, without giving it an unpleasant taste or injuring its quality. We think that this pleasant and efficacious method of giving iron might be adopted with advantage.—*Ibid.*

25. *Burnt Rhubarb in Diarrhœa.*—F. P. Hoblyn, Esq., of the Middlesex Hospital, states that he has used burnt rhubarb for seven years, and found it more serviceable in the diarrhœa, attendant on the last stage of consumption, than the chalk-mixture and opium, or any other of the usual remedies.

I have known it used, he remarks, with the same pleasing effects, for more than twenty years, in incidental diarrhœas. After one or two doses, the pains quickly subside, and the bowels return to their natural state. The dose is from five to ten grains.

The manner of preparing it is to burn the rhubarb powder in an iron crucible, stirring it until it is blackened; then smother it in a covered jar.

It loses two-thirds of its weight by the incineration. It is nearly tasteless. In no one case where I have known it given has it failed. I have given it in port wine, milk, and water.—*Lancet*, 27th Feb., 1841.

26. *Compression of the Carotids in Convulsive Affections.* By M. STROEHLIN. [From time to time we hear of the employment of the above means in certain cerebral affections. Still, however, it is very little practised. The following cases illustrate the method of treatment.]

"I have sometimes, says M. Stroehlin, employed compression of the carotids in hysteric convulsions, and I almost always succeeded in modifying the form of the attack." The author adds the history of two cases of epilepsy, well characterized, where the employment of this means was followed by similar success. The first of these cases was that of a man 24 years of age, strong and vigorous, who had been subject to epileptic attacks for five years, and which were of daily occurrence, sometimes lasting two hours, and very violent; the compression of the carotids at the commencement of the attack always caused them to cease a minute afterwards. The second case was that of a young person 15 years of age, epileptic from infancy, occurring every second day, and of six hours duration. The convulsions were confined to the right side of the face and the upper extremity of the same side. In this case he only compressed the left carotid, and the success was equally marked as in the former. It is necessary, adds M. Stroehlin, that the compression should be as circumscribed as possible, so that the returning current in the jugular vein be not interfered with. M. Stroehlin refers to cases where ligature of the carotid has been applied for the cure of epilepsy, for tumours of the face, for wounds of the artery itself; in which latter cases the patient had been previously epileptic, but when the operation was concluded the convulsive affection disappeared.—*Braithwaite's Retrospect*, from *Archives Générales de Med.*, March, 1841.

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27. *State of the Urine during Pregnancy and Disease.*—M. DONNE read a paper to the Academy of Sciences at their meeting of the 31st May last, the object of which was to show that the urine of pregnant women generally furnishes certain characters by which the existence of pregnancy may be ascertained. From a great number of experiments, M. Donné has ascertained that the urine contains much less free acid, phosphate and sulphate of lime, in pregnant than in other women. This circumstance modifies in a very remarkable manner the microscopic crystals of the salts contained in the urine, and enables us to determine with great probability, if not absolute certainty, the existence of pregnancy. M. Donné has applied the method successfully in more than thirty cases, at different periods of utero-gestation.

The author has also examined the properties of the urine in various diseases. In chlorosis the results obtained have been positive and very striking. Healthy urine, as we all know, contains a certain quantity of iron. In chlorosis all trace of the metal disappears; but as soon as we begin to administer the preparations of iron, it is again found in the urine. According to M. Donné, we cannot consider the cure of chlorosis complete, unless the urine contains its regular proportion of iron, some time after we have ceased to administer the remedy. In certain affections which bear some resemblance to chlorosis, but should be distinguished from it, the author found that the urine contained a considerable quantity of iron.

In cases of pulmonary consumption, a very curious fact was noticed; when the urine is evaporated, instead of leaving the ordinary crystals, it gives rise to a residuum of thick viscid matter, analogous to that extracted from diabetic urine. The author asks whether this be saccharine matter, or some animal substance, and confesses his ignorance on the point; the fact, however, is worthy of attention, especially since the observations of M. Rayer have established some analogy between diabetes and pulmonary consumption, by proving that the latter generally ensues on the apparent cure of the former. However, this appearance of the urine is so constant and remarkable that it will often enable us to diagnosticate the existence of phthisis, even without seeing the patient.

The microscopic crystals of the urine in cases of typhoid fever, are, in like manner, very peculiar. It is difficult to describe them in words, but they bear some resemblance to those obtained from phosphate of ammonia. This kind of crystals is never seen in a state of health; while, on the other hand, the author has never seen them absent in typhoid fever, during many years that he has turned his attention to this subject. Typhoid fever, however, is not the only disease in which they exist; similar crystals are found in cases of pneumonia and acute rheumatism.—*Provincial Med. and Surg. Jour.* June 19, 1841.

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28. *Puerperal Fever.*—During the year 1840 a great number of cases of puerperal fever occurred at the Hôtel-Dieu, in the wards of M. Recamier; a detailed account of the principal cases has been furnished by his *interne*, M. BOURDON, in the *Revue Médicale*. M. Bourdon observes, as one of the most remarkable points in the history of the disease, that although its progress and symptoms were the same in all cases, yet the lesions discovered after death were very various. When, in addition to this circumstance, we reflect on the fluid state of the blood, and the softening of nearly all the organs, without trace of inflammation, we are authorized (says M. Bourdon) to regard this disease as a general affection, connected with some alteration of the blood, which gives rise to the same train of symptoms, although the material lesions resulting from it may be very diversified.

The following is the train of symptoms noted by M. Bourdon; the only variation of any consequence which they presented, was one of intensity. The general appearance of the patient was very peculiar and striking; at first the countenance was sunken and expressive of pain or anxiety; towards the end, it was insensible and expressive of prostration, especially if the disease were about to terminate fatally. The eyes became more or less hollow, and surrounded by a dark circle; the skin of the face was pale, dull, and earthy looking; presenting, in fact, a tint altogether peculiar to this complaint. General weakness and prostration of strength constantly existed, though at various degrees.

On questioning the patient about the origin of the disease, it was always said to have commenced with more or less shivering; and this symptom, with a feeling of general uneasiness, sometimes recurred during the following days, and was proportionate to the subsequent violence of the fever; whenever the shivering was intense at first, prolonged, and recurred several times, the disease terminated fatally. The shivering was soon succeeded by heat of skin, which sometimes alternated with it; the skin was hot and dry, covered, at certain periods, with perspiration; the latter was a favourable symptom, when the general state of the patient improved at the same time; but when cold and viscid, it announced the near approach of death. The pulse was always frequent; in two cases a little hard and full at the commencement; but in all the others it was constantly small, compressible, and undulatory.

Several of the patients complained of headache; a more constant symptom, especially towards the end of the disease, was a low, loquacious delirium, which was commonly a bad sign.

Pain of the abdomen was a constant symptom; but it varied in seat and intensity. Generally speaking, it was severe, and occupied the hypogastric region; in some cases it disappeared suddenly, without any diminution of the tympanitis or improvement of the symptoms. This sudden alteration of sensibility was always a fatal sign. The abdomen was in all cases more or less tympanitic, but not more so in one form of the disease than in another. Some symptoms of disorder of the intestinal canal were, also, usually observed; these were dryness of the tongue, thirst, vomiting, diarrhœa; liquid brown stools, of a fœtid smell, always announced a fatal termination. Hiccup occurred in three cases out of ten, and was absent in several where we had reason to suspect inflammation of the peritoneum. Involuntary discharge of the fæces and urine was always a bad sign.

The lochial discharge was either arrested or diminished in every case, the former occurrence being the more dangerous; the breasts were always more or less flaccid. In dangerous cases, and particularly towards the end of the disease, the respiration became so quick and difficult that it was astonishing no other lesion was found after death, except some congestion at the back of the lungs. In concluding his remarks on the symptoms, M. Bourdon observes, that it was impossible, from any particular symptoms, to determine what peculiar form of the disease was under treatment; and he believes that in the present state of our knowledge this diagnosis is excessively difficult, if not impossible.

As to the prognosis; when the pulse became frequent, soft, and recovered its strength a little, while the skin, at the same time, got moist, the abdomen less painful, and the countenance better, then a favourable termination generally occurred: but when the pulse, without losing any of its frequency, became small, depressed, and undulatory, the tongue dry, the vomiting and diarrhœa obstinate, the abdomen highly tympanitic, the danger was great; and death was certain whenever the pulse continued to become more and more feeble, with cold viscid sweats and involuntary evacuations.

The alterations found after death were various, although, as we have before observed, the progress and symptoms of the disease were the same in all cases. In one case the only morbid appearance that could be discovered was a slight effusion of turbid reddish serum, containing some flocci, into the cavity of the peritoneum. Many pathologists regard this as sufficient evidence of the existence of peritonitis; but, even granting the presence of the latter, how could it explain the highly dangerous symptoms and rapid death of the patient.

In a second case, all the signs of uterine phlebitis were found, but on the most minute examination no trace of pus or metastatic abscess could be discovered in any of the vessels or tissues of the body.

In a third case were found all the degrees of softening of the uterus which constitute the form described by MM. Danyau and Duplay, under the name of gangrenous metritis, and by Boër under that of *putrescentia uteri;* the whole of the internal surface of the uterus was softened, and the walls perforated by gangrene: the peritoneum was inflamed, with effusion of dark, fetid pus; the subperitoneal tissue and the adjacent muscles were also infiltrated with the same kind of pus. Finally, most of the organs were in a state of softening, and the small intestines contained several ulcers without surrounding inflammation.

In a fourth case were observed most of the anatomical characters of the pyogenic fever of M. Voillemier; pus was found in the subperitoneal tissue of the uterus, and in the cellular tissue of the limbs, without any trace of peritonitis, inflammation of the uterine veins or lymphatics, or metastatic abscess, in any of the organs. Lastly, in a fifth autopsy were discovered collections of pus in the cellular tissue of the pelvis, with softening of the organs, and particularly of the right lung.

In addition to the morbid appearances above noticed, some others were constantly observed: a layer of dark-coloured fetid detritus covered the internal surface of the uterus; the quantity and fetidity of this matter was proportionate to the volume of the uterus, and it probably depended on some modification of the lochial secretion. In all the cases the blood contained in the heart and vessels was remarkably fluid, and this condition of the vital fluid does not seem to have sufficiently attracted the notice of pathologists. A third lesion, also constantly found, was softening of the parenchymatous organs, and even of the heart itself; in two cases the mucous membrane of the intestinal canal was softened, and it is probable that the ulcers observed in one of the cases depended on the same cause.

As to the treatment, M. Bourdon observes that no remedy was found beneficial in dangerous and severe cases, or when employed for patients admitted into the hospital in a desperate state. In one of these cases much relief was obtained by the use of a bandage and compresses over the uterus, which was very voluminous. A few hours afterwards, the size of the organ was reduced by one-half, and the expulsion of the fetid secretion contained in it was much facilitated. Blood-letting had no good effect in the few cases in which it was tried. In a certain number of cases, complicated with bilious symptoms, the use of the ipecacuanha was highly beneficial, always mitigating the symptoms and exciting perspiration.—*Ibid.* from *Revue Médicale de Paris,* June, 1841.

29. *Vegetable Nature of Tinea.*—In consequence of a claim put in by Schönlein of Berlin for the priority of the discovery of the *mycoderme* of Tinea, Dr. Gruby of Vienna, has submitted to the Academy of Sciences new details upon the microscopic study of this disease. He positively denies the existence of pustules in *porrigo favosa.* The apparent pustules are, he says, only conglomerations of mycodermata placed between the cells of the epidermis. The follicles of the skin are, therefore, he maintains, only secondarily affected. The disc of the capsule of the crust in tinea, which is only perforated at the commencement, opens in the centre by a small hole, the edges of which are elevated by the continual development of mycodermata. This hole gradually increases in size, and exhibits in the middle a whitish excavation, while the edges of the capsule present a yellow colour. Whilst the hole increases, the mycoderme which is placed in the capsule comes forth, and is developed as a mushroom, until the edges completely disappear. The stems of the micodermata lengthen, and the sporules sprout out more vigorously in the centre than at the circumference. Hence the form of the capsule is exactly the reverse of what it was before it opened;—then, it was depressed in the centre, but now, the centre has become more elevated than the edges.

Dr. Gruby has attempted to transmit by inoculation the vegetable parasite of tinea. In seventy-seven experiments made on plants, silk-worms, reptiles, birds, the mammalia, and on his own person, at different times, he only succeeded once, and that was upon a plant. This fact is very curious, as affording an instance of the transmission of a disease from the human species to a vegetable.

A French physician, M. Meynier of Ornans, is occupied likewise with the investigation of this subject. He states that he communicated his work on the vegetable nature of tinea to the *Gazette Médicale* of Paris in 1836. Since that time, he says that he has made new discoveries regarding the vegetable parasites of man. According to him, warts, whether mucous or cutaneous, are mushrooms, analogous to the *gymnospermia;* lepra and psoriasis are cryptogamic plants, analogous to *lichens* and *mosses;* pulmonary and intestinal tubercles are *lycopodia;* and cancer is also a parasitic vegetable! Time alone can decide whether we are henceforth to have a separate nosological class for diseases produced by vegetable parasites, and whether pulmonary consumption and cancer are to be included in this group. The problem must ere long be solved.—*Lond. and Edin. Med. and Surg. Jour.* Sept. 1841.

SURGICAL PATHOLOGY AND THERAPEUTICS AND OPERATIVE SURGERY.

30. *Aneurism of Innominata—Ligature of the Right Carotid Artery—Death on the eighth day.* An interesting case of this is related by Wm. Fergusson, Esq. of London, in the *London and Ed. Monthly Journ. of Medical Science,* Nov. 1841. The subject was a man 56 years of age, admitted into King's College Hospital, 12th June, 1841, who had enjoyed good health until three months previously, when he suffered severe pains in the right side of the head and neck, extending through the shoulder and arm of the same side. A cough, with which he had been annoyed for many years, became more troublesome, but was not accompanied with pain in the chest, nor in the respiratory passage. Two months before admission he first perceived a small pulsating tumour, about the size of a hazel-nut, situated directly above the inner extremity of the collar bone. He had never had much pain in the tumour itself; but the other pains, with the cough, continued until admission. The swelling, since it was first observed, had gradually increased.

The tumour was seemingly about the size of an orange. When examined carefully, it was observed to pulsate strongly, and its pulsations were synchronous with those of the arteries: it was very compressible and seemed filled with fluid blood only; it was situated immediately behind the lower extremity of the sterno-cleido-mastoid muscle of the right side; its pulsations could be distinctly felt on the outer margin of this muscle; it occupied a part of the space between the two mastoid muscles, and extended about two inches above the upper margin of the sternum. The right carotid and subclavian arteries could be felt beyond the tumour, each pulsating regularly in its normal situation. Pressure on the carotid, opposite the larynx, caused sudden diminution in the size of the swelling, and singular slowness in the pulsations, with a feeling of giddiness, sickness, and faintishness. Pressure on the subclavian, outside of the scaleni muscles, caused less perceptible change, and produced no other marked effect. Simultaneous pressure on both vessels caused a rapid decrease in the size of the tumour; the skin over it wrinkled, and the pulsations seemed almost to cease. The pulse was less perceptible in the right radial artery than in the left. The veins at the root of the neck and fore part of the right shoulder, were fuller and more conspicuous than on the left side. The viscera of the chest seemed healthy; the action of the heart was natural; and there was no reason to suppose that the arch of the aorta, root of the innominata, and arterial system, elsewhere than in the seat of the tumour, were not in as healthy a condition as is natural at the patient's period of life.

The case being a favourable one for the ligature of one or both arteries beyond the disease, Mr. F. determined to place a ligature on the carotid, in the hope that obstruction of this vessel alone might suffice for the cure, and with the intention, should this expectation not be fulfilled, of tying the subclavian at some future period. The patient was put on a spare farinaceous diet; had several doses of laxative medicine; was ordered a fourth of a grain of tartarized antimony thrice a-day; was bled from the arm to eight ounces, and kept quiet for ten days, during which time no marked change occurred, either in his health or in the condition of the tumour, unless it was, that the latter had slightly increased in size.

On the 22d June, Mr. F. placed a ligature on the common carotid, immediately below its bifurcation. Nothing very unusual occurred during the operation. The incisions were made very oblique to the course of the artery, with the object of leaving the tumour undisturbed, and thus averting as much as possible any immediate danger of wounding the sac, or the chance of subsequent inflammation. The ligature was consequently placed very high. The artery was only uncovered to such an extent as to allow the needle to be slipped around it. The proceedings were somewhat retarded by hemorrhage from a small artery and a vein situated immediately under the skin; but by means of a ligature, and the pressure of a curved copper spatula, which was used to assist in keeping the wound open, this annoyance was quickly overcome. Before the patient was removed from the table, the tumour seemed slightly diminished in size, and the pulse in the right wrist was fuller and more bounding than it had been previous to the operation, and much more distinct than that in the left; on being placed in bed, he expressed himself cheerfully, and seemed unconscious of any change produced by the recent proceedings.

At seven o'clock—pulse 80; complains of slight dizziness, and difficulty of breathing; otherwise comfortable. At nine o'clock—the giddiness and difficulty of breathing have gone off.

The patient continued to do well until the 27th, when he suffered from a troublesome cough, with difficult expectoration, and slight pain in the chest, when coughing.

June 28th. One P. M. Slept tolerably during the night, though much troubled by cough and difficult expectoration; pulse 110, and much the same in both wrists; breathing somewhat hurried; countenance anxious, and in his manner there is an appearance of distress, for which it is difficult to ascribe a direct cause. There is evidently slight bronchitis, but this does not seem sufficient to account for his present condition. Bowels being still confined, I ordered an enema, and ℥xii. of blood to be taken from the left arm.

Ten P. M. Cough more troublesome; respiration hurried and more difficult; blood drawn in the morning, cupped and buffed; pulse 120. The wound in the vein reopened, and blood allowed to flow to the extent of ℥xxviii, when the patient became pallid and faint, the pulse at the wrist being nearly imperceptible. At this period, the tumour decreased in size, and its pulsations were much weakened. Bowels opened by the enema; the small doses of tart. of antimony, which have been continued throughout the treatment, ordered to be omitted; three grs. of calomel, one of opium, and one of extract of hyosciamus to be taken immediately.

29th. Blood drawn last night of an inflammatory character. Cough and expectoration have ceased since the bleeding; great difficulty of breathing throughout the night; respiration hurried; countenance anxious and pallid. Pain in deglutition, which has always been felt since the day following the operation, not so great; mouth dry; hands and feet cold; pulse 120, small and weak.—Wound has continued to look well; the left side of the neck opposite the larynx seems fuller than heretofore. Ordered to have three grs. of carb. of ammonia in ℥ss. of spirit. ether. nit. every hour; wine and brandy, ad libitum, and sinapisms to the calves of legs.

From this time he gradually sunk and expired at 8 P. M.

Sectio cadaveris eighteen hours after death.

The external aspect of the body presented no unusual appearance. The tumour was almost as perceptible as it had ever been; it felt firm, and was not so compressible as before death. The thorax was opened, by turning up the lower portion of the sternum; the upper part of this bone being, for the present, left *in situ.* The right lung appeared remarkably healthy, and there was no effusion in the cavity of the pleura. The left lung was slightly adherent at its middle lobe to the pleura costalis; apparently the result of inflammation of a former date. The upper lobe was, to all appearance healthy, as was also the lower; the middle was of a darker colour, and felt more consolidated than any other part of the organ. There was no effusion into the pleura, and this membrane presented no marks of recent inflammation. Sections of any part of the right lung presented no unusual or remarkable appearance, excepting that in all parts there seemed a greater quantity of mucus than was natural; the same remarks are applicable to the upper and lower portions of the left lung; the parenchyma of the middle lobe, however, was gorged with blood and mucus; here and there patches of recent lymph were observable, and several of these were mingled with small effusions of pus.

The larynx, trachea, and bronchial tubes were loaded with ropy mucus, and their lining membrane was very vascular.

The heart was slightly enlarged, there was a patch of lymph on its anterior surface of old date, but otherwise it was healthy in appearance. About an ounce of fluid was found within the pericardium. The valves of the aorta were healthy, and this vessel, though somewhat enlarged, presented nearly the usual appearance at this age. The innominata, left carotid, and left subclavian originated in their usual manner; the two latter were of a natural appearance throughout their extent; the innominata at its origin was of a size proportioned to that of the aorta, but otherwise healthy and natural in condition; about three-fourths of an inch above its origin, it suddenly enlarged, and projected forwards against the sternum; and this swelling was found to be continuous with the tumour at the root of the neck.

The skin of the neck being raised, the sterno mastoid muscle was found slightly spread, and covering the swelling; the lower parts of the sterno hyoid and sterno thyroid muscles were lost in its substance; the subclavian artery, outside of the scaleni muscles, was found in its natural situation and condition on the upper surface of the first rib, and the carotid, behind and above the tumour, was pushed slightly to the right side; it appeared healthy, and of its usual size. The ligature was still very firm, and was placed about one-fourth of an inch below the bifurcation. Little more than one-eighth of an inch of the vessel had been exposed during the operation, and the par vagum and internal jugular were undisturbed in their usual relative position.

Between the artery at the seat of ligature, and the larynx, the cellular texture presented all the appearance of recent inflammation, and several little abcesses, surrounded by cysts of recent lymph, were found in its substance.

The tumour, with the upper portion of the sternum, and inner ends of the clavicles, was now carefully removed, along with the larynx, trachea, and larger vessels at the root of the neck. It was observed to push the trachea a little to the left side, but had produced no change on the right bronchus. A further investigation showed, that it originated entirely from the anterior and upper part of the innominata. The carotid, on a close inspection, though in close contact with the swelling, was not in any way affected, nor did it form any portion of the sac; the subclavian was slightly dilated at its origin, and its anterior wall swelled out, and was continuous with the aneurismal tumour.

The aorta, innominata, subclavian, and carotid were laid open behind; a clot of fibrin, similar to that which is frequently met with as a post-mortem occurrence, was found in the arch of the aorta; a portion extended into the innominata, and was continuous with a larger clot of fibrin, which nearly filled the sac.—There was no clot in the subclavian, nor was there any in the carotid, even as high up as the ligature.

The tumour was opened in front, above the sternum, and was found to be nearly filled with pretty firm clots of fibrin, different in appearance from that in the aorta; being similar to such as are met with in aneurismal sacs, about the same period after the Hunterian operation has been performed.

The par vagum was found in close contact with the right side of the tumour, the recurrent was behind it, and both were in intimate connection with the sac; each being in some degree flattened, but in no other respect altered in appearance. The internal jugular and subclavian veins were of their natural appearance; the innominata of the left side was slightly elongated, being pushed downwards and forwards; that of the right side was in some degree displaced and compressed; but in neither was there any change of the tunics.

31. *Very large Stone in the Bladder—Operation—Death.* Mr. T. M. Greenhow, of Newcastle, records in the *London and Edinburgh Monthly Journal of Medical Science*, Nov. 1841, a case of calculus in which he extracted an enormous stone by the lateral operation. The subject of the case was a man 76 years of age, with his constitution much impaired by his disease.

The operation was performed on the 4th Aug., in the following manner:—A large staff, with the groove in the semi-lateral direction, was introduced, but, as on former occasions, was stopped at the orifice of the bladder by the resistance of the stone. An ample external incision was made in the ordinary direction. The knife, accompanied by the left fore-finger, was passed along the groove, which, however, terminated a third of an inch from the end of the staff. Some care became necessary, therefore, in completing the incision through the prostate into the bladder; but this was quickly accomplished, by making the finger a director, which soon came into contact with the stone. With this the bladder was found to be in close connection; the lining membrance adhering to it by mucous secretions, and long-continued contiguity. It became necessary to separate this cohesion by means of the finger, as far as could be reached; the forceps were then carefully introduced, the finger being used as their director, and the stone was grasped by them. It was found to be of great size, and when carefully attempting the extraction, depressing the handles, so as to avail myself of the evident outlet of the pelvis, the forceps slipped from their hold, leaving the stone behind. A second attempt, though made with the utmost caution, was not more successful. By means of a scoop passed over the upper end of the stone, its attachment to the bladder was in some degree loosened, but its general position could not be altered; and the forceps being again introduced, with the blades directed more upwards, the broader portion of the stone was now more fully embraced by them, and by means of a firm, careful, and continued action, it was extracted entire. Its position was perpendicular; the narrow axis was between the blades of the instrument, and the broad end was upwards. During the extraction of the stone, its great size rendered it necessary to divide some obstructing fibres, and finally to enlarge the external incision through the integuments. Great care was taken to use no unnecessary violence, and, as far as possible, to make the way for the extraction clear by means of the knife. A common scalpel was employed in every stage of the operation. A piece of oiled lint was introduced into the wound, simple dressings were applied, and he was removed to bed, having borne the operation, which did not last many minutes, with fortitude, and apparently without much exhaustion. An opiate was given. In the evening he was easy and cheerful, the urine flowed freely by the wound, and he had slept for some time subsequent to the operation. The oiled lint was removed from the wound, which looked well.

The patient did well until the fifth day, when he became drowsy; pulse less firm; tongue clean, rather dry; less food taken; weaker; frequent nourishment and stimulants were prescribed, but the patient gradually sank and expired on the sixth day.

The calculus weighed 5¾ ounces; long diameter, 3 inches; broad diameter, $2\frac{3}{16}$ inches; thick diameter, 1⅝ inches; circumference, 7⅝ inches in the direction of extraction.

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32. *Solvents for Calculous Concretions.*—The fifth number of the *Pharmaceutical Transactions*, contains a very interesting paper on this subject, by Dr. ALEXANDER URE. The most frequent variety of vesical concretion being that composed of uric acid, Dr. Ure devoted his first series of experiments to the ascertaining the action of solvents upon that acid, as a first step towards establishing some definite views touching their therapeutic values. The substances tried were, carbonate and bicarbonate of potash, carbonate and bicarbonate of soda, borate of potash, biborate of soda, borate of ammonia, soluble carbonate of magnesia, smelling carbonate of ammonia, lime-water, and Castile soap.

One salt, namely, borate of potash, introduced into the preceding list, offers certain advantages, to be detailed in the sequel, which would dispose me to give it the preference over most other substances of this class, for any case of the above character requiring the aid of lithontriptics. Its intrinsic merits of course can be determined only by the test of experience.

The uric acid employed was of extreme purity, accurately prepared according to the process recommended by Professor Woehler of Goettingen. (*Berzelius, Traité de Chimie*, tom. vii, p. 347.) A certain amount of the solvent was dissolved in a given quantity of distilled water at a uniform temperature, to which the acid was added in minute particles at successive intervals, and the whole freely agitated. This was continued until the liquid ceased to take up any more of the acid, as indicated by a faint haze.

One grain of common crystallized carbonate of soda,* dissolved in one ounce of distilled water, took up one grain of uric acid.

One grain of common carbonate of potash, dissolved as above, took up 1·4 grains of uric acid.

One grain of borax, dissolved as above, took up 1·2 grains of uric acid.

One grain of crystallized borate of potash, dissolved as above, took up 1·2 grains of uric acid.

The above solutions remained perfectly limpid after standing twenty-four hours.

Two grains of carbonate of soda, dissolved in one ounce of distilled water,

* The crystallized carbonate of soda and the common granular carbonate of potash have been selected for these experiments, as representing the state in which they must be present in the urine. The uric acid is well adapted for researches of this kind, on account of its sparing solubility in water. According to Mitscherlich, 10,000 parts of water, at 60 deg., are required to dissolve one of it.

took up 1·5 grains of uric acid; a slight flocculent deposit was perceptible after twenty-four hours had elapsed.

Two grains of carbonate of potash, dissolved as above, took up 2·4 grains of uric acid; deposit as in last.

Two grains of borax, dissolved as above, took up 2 grains of uric acid; deposit less than in preceding.

Two grains of borate of potash, dissolved as above, took up 1·4 grains of uric acid; here no appreciable deposit ensued.

Three grains of carbonate of soda, dissolved in one ounce of distilled water, took up 2·3 grains of uric acid; a slight precipitation presently occurred, which persisted during the next day.

Three grains of carbonate of potash, dissolved as above, took up 3·2 grains of uric acid; a flocculent deposit showed itself ere long, which increased considerably in the course of the day. Half an ounce of hot water was added to the liquid, so as to raise its temperature to 100 deg. Fahr., but the deposit still continued.

Three grains of borax, dissolved as above, took up 2·4 grains of uric acid; some deposition eventually appeared, which was not removed by the additional hot water.

Three grains of borate of potash, dissolved as above, took up 2·5 grains of uric acid, the solution remaining perfectly clear, even after the lapse of twenty-four hours. In a repetition of the experiment, a slight precipitate manifested itself, which rapidly vanished upon the addition of half an ounce of hot water.

Three grains of carbonate of soda, dissolved in half an ounce of distilled water, began to deposit flocculi when 1·7 grains of uric had been added. Upon the following day the flocculence was very copious, and did not disappear after dilution with half an ounce of hot water.

Three grains of borax, dissolved as above, showed signs of decomposition with 1·9 grains of uric acid. The deposit on the next day was very considerable, and scarcely affected by the additional half ounce of hot water.

Three grains of borate of potash, dissolved as above, took up 1·2 grains of uric acid. The solution, after the lapse of twenty-four hours, displayed a slight deposit, which immediately vanished on its being diluted with the same quantity of hot water.

Four grains of carbonate of soda, dissolved in one ounce of distilled water, after taking up 2·5 grains of uric acid, began to exhibit an incipient deposit, which, after some hours' repose, was dense and abundant.

Four grains of carbonate of potash, dissolved as above, after taking up 3·5 grains of uric acid, showed ere long an incipient flocculence, exceeding that from the carbonate of soda.

Four grains of borax, dissolved as above, took up 3·2 grains of uric acid. The solution stood limpid, but several opaline globules, as large as millet seeds, were found adhering to the bottom of the vessel on the following morning.

Four grains of borate of potash, dissolved as above, took up nearly 3 grains of uric acid; a light and scanty deposit had formed during the course of the night.

An additional ounce of hot water was put into each of the above solutions, so as to bring them respectively to a temperature of about 100 deg. Fahr.; that of the borate of potash alone became perfectly and permanently clear.

Four grains of bicarbonate of soda, dissolved in an ounce of distilled water, took up 1·1 grains of uric acid, becoming faintly turbid, and letting fall a trifling deposit.

Four grains of bicarbonate of potash, dissolved as above, acted in the same way. Both remained without further change after twenty-four hours.

Four grains of smelling carbonate of ammonia, dissolved as above, became speedily troubled with half a grain of uric acid, producing abundant flakes of urate of ammonia.

The three last experiments go directly to prove that an excess of carbonic acid abates the solvent power.

Four grains of crystallized borate of ammonia, dissolved as above, took up two grains of uric acid, and passed presently into urate of ammonia.

A solution of four grains of Castile soap, in an ounce of distilled water, became almost directly opaque on the admixture of uric acid, and began to throw down a deposit when a grain and a half had been added.

One ounce of lime-water took up 2·2 grains of uric acid, but commenced very soon to let fall a flocculent precipitate, which ere long became very copious, forming in the course of a couple of hours an incrustation upon the sides of the vessel, so coherent as to require muriatic acid for its removal.*

Half an ounce of lime-water, diluted with an equal quantity of distilled water, took up 1·5 grains of uric acid, but prompt decomposition ensued, as in the last experiment. It may be observed here, that Mrs. Stephens's nostrum for stone in the bladder consisted of lime-water, taken along with a solution of soap—truly a most unchemical mixture!

One hundred grain measures of Dinneford's fluid magnesia, diluted with water enough to constitute an ounce by measure, took up one grain of uric acid. The next morning the bottom of the vessel was studded over with numerous white pearly bodies, having a crystalline structure, resembling some varieties of the mineral zeolite, of very sparing solubility in water.

It ought to be noticed that all the above solutions, after having received their maximum of uric acid, betrayed more or less of an alkaline reaction with red litmus paper.

From the preceding investigation may it not be inferred, that the best direct solvents of uric acid, are the preparations of that alkaline base which is most germane to the system, namely, potash, and more especially its carbonate and borate? There is obviously no advantage in a surcharge of carbonic acid, except in so far as it renders the medicine more eligible for internal administration. Woehler could not discover more of this gaseous acid in the urine of a person who had been drinking plentifully of water impregnated with it, than in one who was taking nothing of the kind. Borate of potash has this important feature to recommend it, that any resulting precipitate is immediately re-dissolved by a slight excess of water, which is not the case with respect to the carbonates of potash and soda alone, or the biborate of soda. Hence it would appear, that a very excellent and efficient method of availing ourselves of the conjoint powers of the carbonate and borate, would be furnished by exhibiting the boro-tartrate of potash, the tartrate being converted in its transit through the circulation into carbonate of the same base, while the borate passes through unchanged.†

It is suggested, that probably a good plan for attacking a calculus after it has just made its way into the bladder, would be to give small and oft-repeated doses of the above triple salt, dissolved in a considerable quantity of any aqueous vehicle; and to inject at the same time into the bladder, by means of the double catheter, as modified and improved by M. Leroy d'Etiolles, a weak solution of the borate of potash or soda. I say weak, because it is demonstrated in the foregoing experiments, that no benefit is gained by employing a solution containing more than three grains of the salt to an ounce of water: besides, in working with a menstruum so dilute, no apprehension need be entertained of doing injury to the delicate lining of the bladder.

Although not prepared to deny the disintegrating power over uric calculi possessed by certain preparations of soda, yet I am inclined to think them open to objection, on account of their liability to decomposition when left in contact with uric acid, and still more on account of the very insoluble nature of the resulting compound, urate of soda.[*] Dr. Prout informs me that he has known several instances of persons who voided this salt, in consequence of taking the bicarbonate of soda; and an intelligent pharmaceutical chemist, in the vicinity of London, told me, that after using the above preparation for eighteen months, to relieve acidity of stomach and heartburn, he was seized with inability to retain his urine, accompanied with the discharge of white concrete matter from the bladder, which troublesome symptoms rapidly subsided on discontinuing the medicine. It need scarcely be stated that the same objections must apply to Castile soap.

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* Might not the excessive and prolonged use of lime-water (or strong calcareous spring waters) tend to produce somewhat analogous incrustations upon the mucous coat of the bladder, in individuals labouring under a uric diathesis?

† Professor Liebig mentions, that in the Rhenish provinces, where the inhabitants generally drink light wines containing a considerable amount of tartar, stone is unknown. *Traite de Chimie Organique*, Introduction, p. 92.

Lime-water, smelling carbonate of ammonia, and soluble carbonate of magnesia being still more liable to decomposition than the combinations of soda, although the urates of their several bases more readily dissolve, must still be regarded as very doubtful solvents. Perhaps some exception may be allowed touching the first, the favourite lithontriptic portion of the celebrated Horace Walpole; since it is believed to operate in disaggregating calculi in another way, namely, by virtue of its action upon the cementing mucus; lime-water, as is well known, having the property of dissolving that animal secretion. May not the carbonates of potash and soda exercise a kindred agency?

It is my intention to carry out the application of this principle, of which the above is but a preliminary outline, to other rarer forms of urinary calculus, more particularly with regard to the effect of lactic acid upon the phosphates, and to detail the results on some future occasion.—*Prov. Med. and Surg. Journ.* Nov. 6, 1841.

33. *Retention of Urine—Puncture of the Bladder above the Pubes—Recovery.* The following very interesting and instructive case of this character, is related by Jonathan Toogood, Esq., in the *Prov. Med. and Surg. Journ.* Nov. 6, 1841.

Mr. C. had retention of urine from an enlarged prostate gland, which made the introduction of the catheter frequently necessary; on one occasion no water followed the introduction of the instrument, which was passed without difficulty; repeated trials were made without success; a consultation was held, and although repeated efforts were made to relieve the patient by various instruments, warm baths, and the usual means, a very inconsiderable quantity of urine only could be brought away.

Matters remained in this state for three days, when a gentleman of hospital celebrity was added to the consultation. Having formerly had the care of the patient, he apprehended no difficulty, and passed the instrument with so much ease, that he rather triumphantly desired a vessel to be brought to receive the urine, but on withdrawing the stillette, to his great surprise and mortification, no water flowed. He then determined that there was no water in the bladder, and considered the case to be one of suppression and not retention of urine, and left the patient with the full conviction that he would shortly die. But those who had watched the case from the beginning were of a different opinion, and on careful percussion of the abdomen, the bladder could be traced enormously distended. It was now determined to puncture the bladder, the retention having existed from Thursday night until the following Monday. This was done above the pubes, and a large quantity of highly offensive urine was evacuated with immediate and great relief. Very little hope, however, was entertained of the patient's recovery, for, in addition to his being upwards of seventy years old, he was very corpulent, with a pendulous belly, so that there was every reason to believe that although he might be temporarily relieved, he would sink from infiltration of urine into the surrounding parts and mortification. Shortly after the operation, an elastic catheter was introduced into the bladder through the urethra, and we had the satisfaction of seeing every drop of water pass through it. Our hopes now revived, and we became sanguine of our patient's recovery, and redoubled our efforts to save him. He was most carefully and anxiously watched, the wound was cleansed and brought together with plaster. Nothing could proceed more favourably; all the dangerous symptoms gradually subsided, the wound healed, and he again passed his water naturally, but occasionally it was drawn off. On one of these occasions a stone was distinctly felt, but although many attempts were made at different times to discover it, it could not always be detected. The wound healed firmly, and he recovered his health and spirits so as to enable him to take his usual exercise. He continued in this state for more than a year, when one afternoon he was suddenly attacked with symptoms of peritoneal inflammation, which increased rapidly, and he died in twelve hours.

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[*] The circumstance of its forming the element of a calculus is recorded by M. Leroy d'Etiolles. *Comptes Rendus*, 1839.

On opening the cavity of the abdomen, urine was found effused in considerable quantity from ulceration of the bladder, which appeared to have been occasioned by an angle of a calculus, nine of various sizes being found in the bladder.

The cause of failure in evacuating the contents of the bladder in this case, arose from the shortness of the instrument employed. Baron Hurteloup, to whom I related it, at once pointed it out, and said that if a catheter two feet long had been used, the operation would not have been required.

Bridgewater, Oct. 28, 1841.

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34. *Cases of Dislocation of the Clavicle backwards behind the Sternum.* By M. Morel.—Case I. Lemoine, 17 years of age, was overtaken in a narrow street by a carriage, and had his right shoulder violently squeezed against the wall, in a direction forwards and inwards. He experienced at the time some pain at the bottom of the neck, and a great sensation of suffocation which lasted for more than a quarter of an hour. The dyspnœa gradually subsided, but the motion of the right arm not returning, he, on the 8th day after the accident, entered the *Charité*, when he was found in the following state:—The two shoulders were on the same level, but the right one was nearer the mesial line. The internal extremity of the clavicle was half concealed behind the sternum, and its upper part consequently formed a projection above the bone. When the shoulder was carried backwards, the tumour became more prominent forwards. On depressing the shoulder, it rose, and disengaged itself from behind the sternum, and, by carrying the shoulder upwards, outwards, and backwards, the bone returned to its natural position, the hand could be carried to the head, by directing the elbow backwards, but if it was brought forwards, the attempt caused great pain. Desault's bandage was applied; but, as it slipped, it was replaced by that of Velpeau, which kept the bone completely in position. The patient was lost sight of on the 18th day, as he was obliged to be removed to another ward on account of the appearance of smallpox.

Case II.—Lamotte, 28 years of age, was shoeing a horse, when the animal made violent efforts to free his leg; endeavouring to restrain them, he fell, and met with a dislocation of his clavicle backwards. The next day he was in the following state:—The right shoulder was nearer by sixteen lines, than usual, to the mesial line; there was slight swelling of the external jugular vein; some pain was felt, but more towards the middle than the extremity of the clavicle, the external head of which had disappeared behind the sternum, where it was impossible to feel it. When the hand was carried to the head, there was pain if the elbow was moved forwards, but none if it was directed backwards. Two attempts at reduction made, the one by carrying the shoulder outwards and backwards, the other by acting on the arm in the same direction, were unsuccessful.

M. Lenoir made the patient be seated on a low chair; he then placed a sheet round his body, and fastened it to an iron bar. Two assistants pulled the arm and shoulder outwards and backwards, (almost horizontally in fact,) while another kept the wrist lowered, and at the same time turned towards the left side. M. Lenoir then placed his knee between the shoulders, and with one hand pulled the right one backwards, while with the other he traced the clavicle. Reduction was accomplished, and the bone was retained in its place by the shoulders being kept back by a bandage applied in the form of the figure 8. Another bandage was placed round the body, and kept the elbow close to the side. On the twelfth day this was removed, and a sling had recourse to. On the eighteenth day he was doing well. The reduction was so complete, that the extremity of the dislocated clavicle was more prominent than that of the other.

The first case put on record of this kind of dislocation, caused by violence, was published by M. Pellieux in 1834, in the Revue Médicale. Since then, other two cases have been reported in the Gazette Médicale for 1836–37. Besides the two that we have given above, a third is quoted by the Gazette Médicale, from M. Morel's pamphlet; but we have not given it, as it appears to us not to be a case of dislocation backwards. In Sir A. Cooper's Lectures on Surgery, a case is mentioned, which was produced by deformity of the spine. The scapula was pushed forward, so that sufficient room was not left for the clavicle between that bone and the sternum, and its internal head gradually slipped behind the latter, pressing upon the œsophagus, and giving rise to great difficulty of swallowing. In this case, as reduction was impossible, the clavicle was sawn through, about an inch from the sternum, and dissected out. The operation was done by Mr. Davis, late of Bungay, in Suffolk. From the cases published, M. Morel says, that there are two kinds of this dislocation, viz. backwards and downwards, and backwards and upwards, as when a part of the inner head of the clavicle is above the level of the sternum. We can suppose that the latter species is consecutive, and produced by the action of the sterno-mastoid muscle, and by the weight of the superior extremity. The dislocation downwards is much more difficult than the other to reduce, and when reduction is effected, the bones are not so easily retained in their place.—*L. and E. Monthly Journ. Med. Sci.*, Oct. 1841, from *Gazette Médicale*, 21st Aug. 1841.

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35. *Extract of Belladonna in the Reduction of Paraphimosis.* By Dr. Mignot, of Bordeaux.—A child, three years and a half old, was the subject of severe paraphimosis; the glans red, swollen, and tender; the prepuce strongly drawn back, forming a thick and apparently adherent ring, the constriction of which completely stopped the circulation. This state had lasted eight days, and the sufferings were excessive. Reduction being impossible, leeches were applied to the perineum and hypogastrium; cooling drinks, emollient enemata, cataplasms, lotions, and hip-baths were used, but they only gave slight relief and but for a short time. The strangulation became more menacing, and all the symptoms were aggravated; the glans was bluish and gangrene was threatened, when M. Mignot employed frictions around the glans, with an ointment composed of thirty parts of simple cerate to twelve parts of extract of belladonna. Under the influence of this remedy the circle of constriction relaxed, dilated, and the tissues gradually recovered their normal condition, without loss of substance or suppuration following.

The second patient had acute balanitis, brought on by a severe gonorrhœa, and followed by paraphimosis. The patient refused operation although gangrene was threatened, when the belladonna was applied, which induced relaxation and rapid amendment. It was also applied in a case of phimosis accompanied by chancres and a sympathetic bubo, and three days after its employment the dilatation of the preputial orifice was complete.—*Brit. and For. Med. Rev.* Oct. 1841, from *Bull. Gén. de Thérap.* April, 1841.

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36. *Anchylosis of the Lower Maxilla with the Temporal Bones.*—Dr. Payan, surgeon to the Hôtel Dieu at Aix, in a collection of facts on different diseases of the head, which he has just published, reports this remarkable case. It seems that the patient, 77 years of age, was attacked by the cholera morbus in 1835, and carried to the hospital, where he died in two days. It was observed upon his admission that he could not move the lower jaw, and that the tongue was protruded through an aperture formed by the loss of the four upper incisor teeth. His children and relations stated, that during his lifetime he had frequently told

them that he had been unable to move his jaw from between four and five years of age, which he attributed to an accident he met with at that time, viz: the fall of a table upon his head, probably causing fracture of the maxilla near to the condyles. Upon dissection, complete ossification was found to have taken place with both temporal bones, and the union was so perfect, that no line of demarcation could be seen between them. All the teeth existed, with the exception of one or two molar, and the four upper incisors which had been extracted to admit the introduction of food. They were in close apposition with each other. The inferior incisors were pushed more forwards, and the molars more outwards, than in the natural state. In each parotid duct was found a calculus. No trace of fracture could be discovered in any part of the bone. There was no anchylosis of any other joint. This curious specimen has been frequently exhibited by M. Dubreuil to the medical students at Montpelier.

Cases of anchylosis of this articulation have been recorded before, but they have generally been found only when other joints had undergone the same process. An officer died at Metz in 1803, who had long been affected with general rheumatism, brought on by fatigue during the war, in a cold and moist country. Upon dissection, every articulation was found anchylosed, and his skeleton, which is now in the museum of the Ecole de Médecine, forms in reality a single bone.—*Lond. and Edin. Monthly Jour. of Med. Sci.*, from *Gaz. Méd. de Paris*, 28 Aug. 1841.

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37. *Decoction of Soot in a case of Burn.* By Dr. Ebers of Bordeaux.—A young girl, about the age of puberty, in an epileptic fit, fell upon the fire. The back part of the fore-arm, all the hand, and the left side of the neck, from the base of the lower jaw, to the inferior half of the breast of the same side, were severely burnt, with great destruction of the skin. Amputation of the arm was proposed, but the parents refused permission. The sloughs separated at the end of three weeks. The bones were charred in several places. Notwithstanding the employment of astringents, and a generous diet, the patient began to sink from the profuse discharge. Dr. Ebers then determined to try the effect of the decoction of soot, in the cicatrization of the wound. A handful of soot was boiled in eight pounds of water, until the fluid was reduced to ℔ij. Lint was then soaked in it, and applied to the granulating surface. The next day, instead of the enormous secretion of pus which had formerly taken place, the lint was hardly wet through; the surface of the sore was red and level; the granulations were depressed, and the circumference of the ulcer was surmounted by a cicatrix of two lines in breadth. In eight days, the whole extent of the wound, with the exception of those points at which the bones were exposed, was covered by a smooth and level cicatrix. Stimulant applications were then applied to the naked bones, and as soon as they were covered by granulations, cicatrization was effected in an equally rapid manner, by the decoction of soot. The patient was cured of her epileptic fits, by the flow of the catamenia taking place.

It seems impossible to deny the effect of the soot in the case just mentioned. It is not likely, however, that it will be found equally successful in the hands of all who try it. If it always has the power ascribed to it here, it would be a dangerous remedy in those cases of suppuration of long standing, in which, from a sudden cessation of the discharge, the constitution is so apt to suffer. It appears to have acted as a stimulant; and it may be useful instead of the nitrate of silver, or sulphate of copper, in cases where they are used to keep down flabby granulations.—*Journ. de Méd. et de Chirurg. Prat.* June, 1841, from *Journ. de Méd. Prat. de Bordeaux.*

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38. *Extraction of Foreign Bodies from the Ear by Syringing with cold water.*—Mr. Carpenter of Castlecomer has successfully employed injections of cold water for the removal of foreign bodies from the ear. "The first case," he observes, "brought to me, some years back, was one in which the foreign body was a garden pea, which, as is usual, was pushed in as far as the tympanum by

the interference of the child's friends. The instrument I selected was a very small forceps with blunt points, with which I could catch the pea, but could not move it, and, on endeavouring to do so, caused intolerable pain. It immediately occurred to me to inject cold water with force, in order to at least displace the pea, and perhaps thereby render it more manageable—I did so with a two ounce syringe, and found the pea so far displaced as to lie at the orifice of the meatus, whence I removed it without further trouble or pain to the child. Since that I have extracted many peas in the same way—in some instances they have lain at the orifice, and in others been forced out completely. So far I was satisfied that peas could be removed by the above method, and will admit that I felt anxious to have an opportunity of trying my hand on something of more difficult extraction. About six months back that offered—the substance was a pebble of a most irregular shape, and so large that I was surprised how the child could have borne to introduce it—the meatus was not inflamed; but the pebble was so far in, and so wedged in its place, that to touch it ever so lightly with any instrument, was almost enough to throw the child into convulsions. I almost despaired of succeeding with the syringe, but made the trial, and not having a two ounce one at hand, used a pint one—the first injection failed; but, while using a second, the pebble, much to my satisfaction, was forced out on the napkin held under.

In the last case brought to me I could hardly feel the foreign body with a silver probe, nor could the child's parents tell me what it was; however, knowing it to be small, I used a small sized syringe, and by one injection had a grain of oats at the orifice of the meatus.—*Dublin Medical Press*, June 20th, 1841.

39. *New variety of Hernia.—Hernia destitute of Peritoneal Sac.* By M. Dumeaux.—The following remarkable disposition of parts was observed in the body of a man between 55 and 60 years of age, who had a large scrotal hernia on the right side. After removing all the coverings of the tumour, the hernial sac, or what appeared to be the sac, instead of being a uniformly resisting membrane, presented very distinct muscular fasciculi, and the posterior wall of the cæcum was immediately recognized. On examination by the abdomen it was found that the cæcum, instead of occupying the iliac fossa, was placed on the abdominal wall, and covered by peritoneum on one of its surfaces only. Its adherent wall was engaged in the inguinal canal forming part of the hernial tumour. The free wall, covered with peritoneum, followed, being as it were invaginated in the former, and forming towards the abdomen a cavity or true hernial sac, in which seven or eight inches of intestine were engaged.

This singular species of hernia has never before been described. The preparation was presented to the Anatomical Society.—*B. and F. Med. Rev.* Oct. 1841, from *Annales de Chirurg.* July, 1841.

40. *Pruritus Scroti cured by fresh Lemon Juice.* By Dr. Oppler, of Tarnourtz. —This was an extremely distressing case, that had resisted all internal and external means for ten weeks, depriving the patient of sleep, and producing incessant distress. The pruritus extended to the penis, and was accompanied by no primary rash, nor any perceptible local alteration except what was produced by the friction. A wash of diluted lemon-juice gave immediate relief, and after a few applications produced a perfect cure.—*Ibid.* from *Berlin Med. Zeit.* June 30th, 1841.

41. *Cure of Ozæna.*—Dr. Detmold of Hanover says, that he has never failed to cure ordinary ozæna (by which he means the chronic coryza accompanied by a stinking discharge from the nose and a flabby relaxed state of the Schneiderian membrane) by the use of an injection composed of one or two drachms of chloride of lime rubbed up in a mortar with thirteen ounces of decoction of rhatany root, and strained off after standing for half an hour. About half an ounce of this must be injected into the nose three or four times a day with a syringe whose point is sufficiently long to carry the fluid high up into the nasal passages.

The use of the remedy should be accompanied by the occasional administration of purgatives. It is very beneficial also in cases of chronic otitis with offensive discharge from the ear.—*Ibid.* from *Holscher's Annalen*, B. 1804.

42. *Amputation of the Arm with the Scapula, and one-half of the Clavicle: also, Removal of a Testicle.* By Gaetani-Bey. On the 31st of December 1830, a boy of fourteen years of age was brought to the hospital of Cairo, severely injured by an explosion in a cannon-foundry. The soft parts of the left arm and shoulder were cruelly lacerated, and the bones fractured. The spermatic cord of the same side was found divided. The injuries of other parts of the body were not serious.

Gaetani-Bey having tied the spermatic artery, and removed the testicle, examined the state of the superior extremity. He found there was a comminuted fracture of the upper part of the humerus, and that the soft parts were lacerated, and looked as if they had been pounded. Excision was immediately resolved upon, and practised. The scapula being then, however, discovered to be shattered into various fragments,—some of them perfectly isolated from one another—was removed, along with the muscles attached to it, the clavicle being separated from the acromion, and the skin which still remained, covering the inferior angle of the scapula, carefully dissected, so as to afford a covering for the parts exposed by the operation. The acromial end of the clavicle presenting an unseemly prominence, was then excised. A compress of several folds was placed under the bone to preserve the nerves and vessels from the saw. The edges of the extensive wound were so irregular and contused, as to render it necessary to clip with the scissors what could not unite by the first intention. Adhesion was accomplished by means of bandages, and a few points of suture. The traumatic fever was slight, and the only untoward occurrence during the cure, was a gangrenous state of the wound of the scrotum. That of the shoulder was in a great measure united on the 4th February, although the flaps did not entirely cover the surface. On the 24th February, the cicatrization of both wounds was complete.—*Lond. and Edin. Monthly Med. and Surg. Journ.* Sept. 1841, from *Annali Universali*, vol. xcviii, p. 5.

43. *Accidental bending of the Bones.*—Case I. Louis Martin, ætat. 8, fell from a height of some feet upon his hands. Immediately after the fall he complained of acute pain in the right fore-arm, which Mr. Chalu, who was called to visit him, found to be bent in its middle part to the extent of a quarter of a circle. No crepitation was present, there was no irregularity of surface on either the radial or ulnar sides of the arm, the external face was convex, and the internal concave, and both were smooth and without any irregularity as in partial fractures. The interosseous space was in no way altered. The bones were restored to their natural position, by seizing them at the wrist and elbow, and making firm pressure with the two thumbs at their convex part. A fracture apparatus was afterwards applied, and was continued for a short time, the limb being at its removal as straight and firm as that of the opposite side.

Case II.—Victor Rigaud, ætat. 11, fell in leaping over the back of a playmate, and alighted upon his hands. The right fore-arm was much curved in its middle part, the interosseous space was in no way contracted, there was no crepitation or displacement of either bone. The wrist and elbow joints admitted of motion without pain. The deformity was removed as in the preceding case, and splints applied. At the time of their removal, on the fifth day, the limb had entirely regained its normal appearance.—*Journ. des Connaissances Médicales*, 1840.

[The above well marked cases we have been induced to transcribe from observing that considerable discussion has recently occurred in one of the English periodicals in respect to accidental bending of the long bones in children, some regarding the bent position of the bone as always the result of its partial fracture, while others look upon it as nothing more than simple curvature without rupture of the bony fibres. That both of these states may occur upon the application of force to young bones, cannot at this day be questioned, though it is probable that the injuries are often confounded one with the other. From our own observations in this vicinity, we believe this practically but of little moment, as both injuries are generally treated in the same manner, viz. by the application of splints and bandages after careful removal of the deformity by the hand of the surgeon.

Simple bending of the bones had been repeatedly seen and were well described, so long ago as 1810, by Prof. Jurine of Geneva: he speaks of the accident in the fore-arm as not very rare, having treated about twenty of these cases during a practice of forty years. Thierry of Bordeaux, Martin and Chevalier, had all too met with, and published cases of this kind, prior to the appearance of Jurine's paper, the former of whom asserts, that Haller, in experimenting upon the subject, had been able satisfactorily to produce the same accident in young animals. Dr. J. R. Barton is the first author, in our language, who directed attention to the subject, and in the excellent paper published by him in 1821, (*Philad. Med. Recorder*,) which is still the best monograph that we possess, the distinctive symptoms of simple bending of the bones and partial fractures, were first pointed out.

The diagnostic marks of these accidents are as follows:—In bending of the bones we find an unnatural curve in the limb which may be increased or diminished optionally, with a disposition in the parts when straightend to reassume their bent position. The accident is unattended by any displacement of fragments, or by crepitus, but is accompanied by pain and often loss of power in the limb. In yartial or incomplete fracture, we have pain and loss of power in the limb, with well marked angular deformity at the point of injury, instead of a mere curvature, as in the former case. The deformity can be increased in one direction only, and in efforts on the part of the surgeon to remove it, a perfect fracture occasionally occurs.

The fore-arm is by far the most common seat of these accidents, though by no means the only part in which they are met with. Jurine has seen the humerus simply bent forwards and a little inwards, in a child aged seven years; and well detailed observations are recorded, where both incomplete fractures, and bending have occurred in the leg and thigh.] G. W. N.

OPHTHALMOLOGY.

44. *Injury from a Percussion Cap.*—Edward Creer, æt. 28, cotton-spinner from Preston, was admitted an in-patient Nov. 1, 1841, under the care of Mr. Walker. From his account it appears, that whilst hammering a percussion cap, a fragment of the metallic body forcibly struck the right eye, but whether it actually entered, he is unaware. The accident occurred six weeks before his admission, and was followed by considerable pain and inflammation of the organ, which has continued to this time.

On examining the eye, a very considerable amount of vascularity, both of the conjunctiva and sclerotica, was noticed; the cornea was observed to be slightly opaque at several points, particularly near the centre, where a cicatrix had apparently formed, probably the result of the wound inflicted at the time of the accident; the pupil was completely obliterated, the iris changed in colour, projecting, and at its central portion adherent to the injured part of the cornea, the anterior chamber being almost annihilated. The general form of the eye had undergone no change, neither was there any enlargement of it. Some degree of tenderness of the globe, on pressure being made, was complained of, and the pain he experienced was very severe, of a pulsating character, and much aggravated during the night. Vision was totally destroyed, and there was not the least perception of light. His general health had not been materially impaired. For the first three weeks after the receipt of the injury, he had been unable to attend to his work. He then resumed it for a few days, when the other eye becoming irritable, watery, and impatient of light, he was again compelled to desist.

From the long continuance of the irritation, and the nature of the injury, it appeared more than probable that a portion of the percussion-cap had been projected through the cornea and iris into the posterior chamber, and that no effectual relief would be obtained, except by an operation which would secure the discharge of the foreign body. This could only be accomplished by the removal of a portion of the tunics, so as to admit of the complete evacuation of the contents of the globe. In this case, vision being irrecoverably lost, there could be no valid objection to sinking the eye. Coupled with this consideration, the danger of sympathetic inflammation being established in the other eye—the premonitory symptoms of which had indeed already commenced—there could be no longer room for hesitation as to the propriety of adopting such a proceeding.

Nov. 2d.—At a consultation this morning, it was decided that the operation of sinking the injured organ should be performed without loss of time. The patient, having assented, was placed on a sofa, the head and shoulders being duly elevated. The lids being properly secured, Mr. Walker passed his double-edged cataract-knife through the front of the eye, commencing at the outer canthus, in such a manner as to make a flap of the superior half of the cornea, and a portion of the sclerotica; the flap was then laid hold of with a forceps, and, with the curved scissors, a large portion of the cornea with the adjacent sclerotica was excised. Along with the disorganized humours, a considerable quantity of puriform matter immediately escaped, and, in addition, *a fragment of the percussion-cap*, which had preserved its metallic character, not having become in the slightest degree corroded. A draught, containing forty drops of laudanum, was immediately administered, and a poultice ordered to be applied over the orbit, and occasionally renewed. He felt considerable pain for a short time after the operation, but in the evening he was quite easy. Another draught, containing thirty drops of laudanum, was directed to be given at bed-time.

3d. He had six hours' sound sleep, being the best night since the receipt of the injury. No constitutional disturbance, and but little uneasiness about the eye. Continue the poultices.

4th. Makes no complaint. Senna draught to be administered to-morrow morning, as the bowels have not acted since the operation.

6th. All irritation has ceased; the wound is quite healed, and the eye has sunk back into the orbit. The irritability of the left eye has also completely subsided. At his own request, he was discharged this day.

The operation of sinking the injured eye may, at first view, appear somewhat forbidding. This case, however, clearly points out the propriety of the proceeding. Supposing the mischief to have been allowed to run its course unchecked, what would have been the result? For many weeks or months, the patient must have been subject to a continuance of suffering, his sleep interrupted, and his health materially impaired. Possibly, after a time, the matter may have escaped by a process of ulceration of the tunics,—a process usually accompanied by intense pain. In any event, the eye must have been destroyed, and become either atrophied or staphylomatous, and, so long as the foreign body remained within, a perpetual source of irritation. The sound organ most probably would have participated in the diseased action, and all useful vision, perhaps, destroyed. As it is, the patient's sufferings are over, and he is enabled to return to his occupation immediately. The operation, in these circumstances, was first practised by Mr. Barton, a senior surgeon to the hospital, and is now constantly performed in similar cases.—*Prov. Med. and Surg. Journ.* Nov. 13, 1841.

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45. *Spontaneous Hemorrhage from the Eyes.* By Dr. Kersten of Magdeburg. There are two sources whence the blood flows in these cases; either there is a real secretion of bloody tears by the lachrymal gland, which is a very unusual occurrence, or hemorrhage takes place from the vessels of the conjunctiva of

the globe or eyelids, or from the caruncula lachrymalis. It was from the latter source that the blood flowed in the case of a girl aged 18, who came under Dr. Kersten's notice. She was the child of phthisical parents, both of whom died during her infancy. In her childhood she had but indifferent health, suffering from rheumatic pains in various parts of her body, and afterwards from fits, resembling epilepsy. When twelve years old, she received a wound over her left orbit, so small that it left no scar visible. Soon after the receipt of this injury, however, blood began to flow from both eyes, and continued to run for fourteen days, in such quantity as to render her very weak. From this time, the bleeding returned every four weeks, but no medical assistance was sought by the patient. In her sixteenth year the preliminary signs of menstruation occurred, but no secretion from the uterus appeared: the hemorrhage from the eyes, on the other hand, continued to occur with regularity. A physician who saw her at this time stated that the bleeding came on with regularity at 10 A. M. and 4 P. M., at each of which periods it continued for half an hour, and recurred daily for a fortnight. The blood issued in drops from the corner of each eye, but during its flow, the patient sometimes fainted. Pain in the head and eyes, a hard pulse, and considerable radiated redness of the conjunctiva, accompanied these attacks. The patient also asserted, that during their continuance, all objects seemed to her of a red colour. After the preliminary symptoms had continued for some time, menstruation occurred, and the hemorrhage from the eyes ceased. This amendment, however, continued only for a few months, for, though the menses flowed regularly, yet hemorrhage recurred from both eyes, and on November 29, 1839, the patient came under Dr. Kersten's care. Her face was then covered with blood, which constantly oozed forth from between the eyelids, and she was unable to open her eyes, owing to great intolerance of light. She was extremely weak, though quite sensible, and her pulse was extremely small and feeble. At that time the hemorrhage observed a cycle of three days, continuing for that time, then disappearing for three days, and then once more recurring. In the intervals of the hemorrhage, the conjunctiva of the lids and of the globe was seen to be red and tumid, the cornea cloudy, the eyes intolerant of light. When the blood was flowing, its source was evidently the caruncula lachrymalis and the conjunctiva; and in the course of three days, the quantity amounted to eight or ten ounces. The patient's general health was much impaired, and she had an anemic and leucophlegmatic appearance. She remained only ten days under Dr. Kersten's observation, but at the end of a year he saw her again. During the interval, her general health had much improved, and the hemorrhage from the eyes occurred much less frequently, and no longer at regular intervals. Sometimes it did not take place for three weeks. She remained in the hospital eighteen days, during which time it occurred once to the amount of four ounces, but ceased within six hours. She did not on this occasion come into the hospital on account of the hemorrhage, and accordingly she left it as soon as another ailment, for which she had sought relief, was cured.—*Lond. and Edin. Monthly Journ. of Med. Sci.* Nov. 1841, from *Rust's Magazin*, Bd. 58, Heft. 1.

46. *Two Cases of Strabismus cured without Operation.* By M. BEYDLER.—A woman, thirty-three years of age, regular in menstruation, had been affected with diplopia for six weeks. There was convergent strabismus of the right eye, apparently owing to paralysis of the external rectus. It manifested itself after noises in the head. Half a grain of strychnine was dropped into the eye daily, which was followed by amelioration; and complete re-establishment of sight succeeded six applications of electricity, twenty or thirty sparks being disengaged at the external angle of the eye at each application.

A man, thirty years of age, after acute mental suffering caused by his trial in a court of justice, suddenly squinted with the left eye. He was acquitted, and after fifteen days the two eyes became again perfectly parallel.—*Brit. and For. Med. Rev.* Oct. 1841, from *Annales de la Soc. de Méd. de Gand.* Sept. 1840.

47. *Injections of the Iris.*—Professor Grimelli, of Modena, has made some experiments to support the opinions of Dr. Fario upon the vascular erectile structure of the iris. The substances which answer best for very fine injections of this organ are olive or walnut oil variously coloured, which penetrates into the most delicate vascular ramusculi without transuding through their coats, and preserves for a long time the parts which they impregnate. In injecting the bodies of children, Dr. Grimelli observed, that from being soft and much dilated, the iris became turgid, and contracted more than half its diameter, in the same manner as when the retina is affected by light during life. This fact appears to prove that the iris is composed of a union of vessels forming a disc, in the centre of which is the pupillary aperture, and the circumference of which is attached to the ciliary ligament. By the aid of the lens and microscope, we see that the very fine vessels which constitute the iris are disposed between the pupillary and ciliary circles, under the form of rectilinear and curvilinear radii, curved upon themselves and zigzag; agglomerated and united in an inextricable manner. We observe also some ramifications disposed in circles between the pupillary and ciliary circles, more or less near each other, and always few in number. It results from this disposition of the minute vessels, fixed towards the larger circle and moveable towards the lesser, that the sanguineous afflux and turgescence unfold the iris and contract the pupil, and that the return of blood and diminution of turgescence, fold again or wrinkle the membrane and dilate the pupillary aperture. Thus, contrary to the generally admitted opinion on the muscularity of the iris, as it appears to the author, this membrane is composed of a turgescible or erectile vascular tissue, in which arterial vessels predominate, and Dr. Grimelli is led by analogy to conclude that the muscles of the small bones of the ear are constituted in the same manner.—*Ibid.* from *Rev. Méd.* June, 1841.

48. *Absence of the Nasal Duct and its Artificial Formation.* By M. Berard.—A man, 21 years of age, was admitted into the hospital Necker on account of congenital fistula lachrymalis. This fistula discharged a limpid transparent fluid, and caused continual epiphora. On pressing on the angle of the eye in the morning, a muco-purulent liquid flowed from the fistulous orifice and from the puncta. The nostril of the same size was habitually dry; stimulating powders, such as snuff, becoming dry without exciting the secretion of the pituitary membrane. A stylet introduced into the fistulous orifice in the direction of the nasal duct would not pass, nor was it possible to penetrate its nasal orifice. No doubt could exist, therefore, of its congenital absence, and M. Bérard made an artificial nasal duct by piercing the os unguis after the manner of Woolhouse.

The inferior border of the internal portion of the tendon of the orbicularis being laid bare by incision, M. Bérard directed a trocar downwards, backwards, and inwards, perforating the internal wall of the orbit. The trocar was immediately replaced by a silver canula about half an inch long, enlarged at its two extremities, and on closing the mouth and nostrils of the patient, the air passed through the canula, showing that it was well placed. Three days after the operation the small wound had cicatrized; no bad symptoms followed. In two months, the patient having neglected the directions of the surgeon, returned with epiphora, when M. Bérard changed the canula, and in two months the epiphora had completely disappeared, and the patient was quite well in February last.—*Ibid.* from *Bull. Gén. de Thérapeut.* July, 1841.

49. *On the Curative Influence of Galvanism in some of the Organic Diseases of the Eye.* By Dr. Lerche of St. Petersburg.—To Dr. Crusell of Finland is due the honour of having employed galvanism in a new and peculiar manner for the cure of organic diseases. Having been attracted by the treatise on the subject which he had sent to the Imperial Academy of Sciences, I had proposed to repeat the galvanic experiments instituted by him on the diseases of the lens in animals. The necessary apparatus was not yet completed when Dr. Crusell himself arrived at St. Petersburg; we therefore determined to experiment in his

presence and with his assistance. For the subject of the first experiment we chose a complete leucoma of the cornea, which was deemed incurable, and in which, therefore, nothing could be lost, and perhaps something might be gained. The patient, a boatman sixty-eight years old, was in our hospital for chronic inflammation of the other eye. Our apparatus, according to the directions of Dr. Crusell, consisted of a simple galvanic circle of one zinc and one copper plate, both immersed in dilute sulphuric acid. The wire proceeding from the copper-plate, which we named the copper-pole, was placed in contact with the leucoma; that coming from the zinc-plate, the zinc-pole, was made to touch the patient's tongue, and the galvanic current was maintained for two minutes. The patient did not suffer in the least degree, neither did any unpleasant symptoms follow the operation; on the contrary, the chalky dulness at the margin of the cornea appeared somewhat thinner and clearer. The operation was repeated after three days, and we saw again a partial alteration in the state of the leucoma: and the patient, on his part, asserted that he had an increased perception of light.

The idea was now not remote to apply galvanism for the cure of opacities of the internal tissues of the eye. The results obtained by Dr. Crusell, in his experiments on the eyes of animals, strengthened our expectation of doing good, and we had opportunities enough of repeating them on eyes which had been regarded as almost or quite incurable. For safety's sake, however, we determined first to see the effects of the operation on some animal, and a young pig was chosen for the purpose. A fine cataract-needle fixed on the zinc-pole was passed through the cornea into the crystalline lens of the right eye, and the wire from the copper-pole was stuck into the ear. After thus remaining for four minutes the pupil began to grow turbid, and the operation was discontinued on the right but repeated on the left eye. Some days after we found completely-formed cataracts in both eyes, and the pig was quite blind.

Now, according to the theory, the artificially-produced dulness of the lens ought to be removed by a reversed galvanic action, and before we could feel justified in undertaking similar experiments in human eyes it was necessary to obtain the proof that such would be the case. After ten days, therefore, we proceeded to this second operation. In three minutes, (the galvanic current being maintained through the wires which were now so placed that the copper-pole was connected with the eye and the zinc with the ear,) there appeared bubbles of gas in the pupil, and the process of solution seemed to be going on; the experiment was therefore at once brought to a close. The pupil appeared smoky and less dull. In four days it had almost regained its natural clearness; and the sight, so far as we could judge from the animal's action, was restored. In the cornea there was an opaque spot around the aperture made by the needle. This result at once determined us to make an experiment of a similar kind on the human eye.

We chose an old copper-smith from Finland, who had a long time previously been successfully operated on for cataract in the left eye. The right eye had presented a firm yellowish-brown capsulo-lenticular cataract, which had adhesions to the iris. It had been once depressed but it rose again; and in another attempt to break it up, nothing more could be done on account of its hardness, than the making of one vertical cut through its substance. This, however, rapidly closed, and for two months afterwards a variety of means were employed for the solution of the cataract without the least benefit. It was now very large, and lay close behind the widely-dilated, somewhat irregular, and immovable pupil. The patient had a perception of light through it.

The galvanic operation was commenced in the presence of Dr. Crusell, in the forenoon of the 11th of November. It was very surprising to us to see, when the fine cataract-needle fixed on the copper-pole was inserted into the lens, and then suddenly burst into three pieces, of which one was carried upwards and inwards, and another towards the temple, and the third projected downwards through the pupil into the anterior chamber. The triangular fissure left between them appeared clear and black. We now thought it best, as this was the first experiment of the kind on a living man, to stay the galvanic action. The patient could already see sufficiently to discern, with his right eye alone, both a finger held before it, and the face of a person standing in front of him. The operation lasted a minute, and neither produced pain nor was followed by inflammation or any other bad symptoms.

Here the history ceases; the authors thought they had better leave the case with a limited amount of amendment, than run the risk of marring the advantage they had gained, and of throwing unnecessary discredit on the operation by going further. The facts, however, seemed to merit record as proofs that the plan is without danger, and offers some prospect of effecting a permanent cure of the disease.—*Ibid.* from *Med. Zeit.* June, 1841.

[We have transferred the above report to our pages, though we must confess that we do not place much faith in this method of treating cataract.]

MIDWIFERY.

50. *Diagnosis of Pregnancy with Three Children.* Dr. Bell Fletcher, Physician to the General Dispensary, Birmingham, has communicated in the *Lancet*, (Sep. 11, 1841,) the following very interesting example of this.

Mary Coleman, aged 30, presented herself as a patient at the General Dispensary of Birmingham on the 31st of July, 1840. Her tongue was foul, and bowels inactive; the abdomen was extremely large, and the thighs and legs very œdematous. She had supposed herself pregnant, but is now so large and her legs so much swelled that she thinks herself dropsical. Menstruation has ceased for some months.

On examination of the abdomen, the uterus was found extraordinarily enlarged. On applying the stethoscope the sound called "bruit placentairé" was heard in the usual position, and the pulsations of three distinct fœtal hearts in the following situations:—Six inches to the right of the navel, and on a line drawn across the abdomen two inches below it, a fœtal heart was heard beating distinctly; on the left side of the navel about six inches, and on the same transverse line, was heard another fœtal heart, equally distinct as the former; and about four inches above the navel on the median line was heard another pulsation of a fœtal heart, but much less distinct than the other two. These pulsations, although corresponding apparently with each other in frequency, were quite distinct, for on auscultating around each, the sound of the one was completely lost before the other was distinguished; the two former became inaudible about three inches from the points indicated; the last spoken of was scarcely audible at an inch distant from the point mentioned, it was very faint, but I felt convinced that it was independent of either of the others, and stated to her and others that I believed her womb contained three children. On the 27th of September, 1840, she brought forth three little girls, who are alive and fine healthy children at this time.

51. *Delivery, at the full time, of a Fœtus, dead four months previously.* By Dr. Brette of Guingamp.—A lady passed the four first months of her second pregnancy naturally, and the movements of the child had been felt. She made a short journey in a carriage: some sharp pains of the abdomen supervened, which were subdued after 48 hours' rest. On resuming her journey, the pains recurred, and from that time the movements of the child were not felt. No discharge of any kind occurred, but the belly diminished in volume so much as to lead to the belief that she had not been pregnant. In October, at the time when her pregnancy should have attained its full term, she was seized with labour pains, and was soon delivered of a male child. The cord, which was of the thickness of a hen's quill, on being divided, discharged a few drops of a reddish fluid. The child was, at most, six inches long. The skin was rather reddish, and the epidermis was not removed by friction. There was an opening of about two lines in breadth in the scalp, which discharged a semipurulent

fluid, and the meninges at that part were found partially disorganized. No further examination was permitted, but the appearances of the fœtus indicated a child of about the fifth month. The mother recovered easily.—*Lond. and Edin. Monthly Journ. of Med. Sci.* Oct. 1841, from *Journ. de Chirurg. et de Méd. Prat.* May, 1841.

[A similar case occurred in the practice of the editor of this Journal, (see No. for Aug. 1837, p. 535,) and another in that of Dr. Porter of New London, (see No. for Aug. 1840, p. 307.]

52. *Birth of Twins—the one of five months, dead and atrophied; the other living and healthy at full time.* By M. Ménard of Nantes.—On the 15th of October 1840, M. Ménard was summoned to attend a woman who had been married on the 5th of January preceding, and had not menstruated since the 21st of that month. During her pregnancy she had not suffered the slightest inconvenience. M. Ménard found the cervix uteri obliterated, the os undilated, and the pains sharp and frequent. Next day, although the contractions were stronger, no progress was made. On the evening of the 17th, after 48 hours of labour, the os uteri slightly dilated, permitting the finger to ascertain the pressure of a soft, unequal, unresisting substance. M. Ménard called in two brother practitioners. At eight o'clock, the rupture of this soft body gave exit to two or three spoonfuls of a creamy fluid, (*putrilage cremeux*,) without smell. Fragments of bone, indicating the presence of a skeleton to be the cause of the difficult labour, were felt within the uterus. After two hours, two ribs, denuded of their periosteum, some epiphyses, and several cartilages, were extracted; but, owing to the slow dilatation of the os uteri, it was not till the morning of the 18th, that a superior extremity, then two more ribs, and lastly, the remainder of the dead fœtus, were extracted by the fingers, in one soft, dry, flattened mass. The membranes of a second fœtus then protruded, and in two hours a healthy living child was born. The hand was introduced to remove the placenta, owing to the os uteri contracting, and the cord being broken. An elliptical portion of the placenta, hard and atrophied, three inches long, two broad, and four lines thick, consisted of a yellowish fibrous tissue of homogeneous texture, which, when cut across, resembled the section of a sponge soaked in water; its uterine surface was smooth, and without any trace of globules. The other portion of the placenta was in a perfectly normal state, communicating, however, with the diseased part by means of a fibrous tissue of an inch in length.—*Ibid.* Sept. 1841, from *Journ. de la Section de Médecine de la Soc. Acad. du Départ. de la Loire-Inférieure*, vol. xvii.

[A similar case was recorded by Dr. Porter of New London, in our No. for Aug. 1840, p. 308.]

53. *Extraction of a foreign Body from the Walls of the Uterus.*—A woman, aged 30, was admitted into the Pitié Hospital of Paris, on September 14, 1840, with symptoms of metritis. The uterus was felt like an irregular hard tumour in the hypogastrium. There was great patency of the os uteri, and within the organ, where the speculum was introduced into the vagina, was discovered something of a whitish colour, around which a probe could be passed. It was found to be a bit of wooden stick; and was carefully extracted with long polypus forceps. It measured 122 millimetres in length, was bent at one end, and pointed at the other. The stick, it was supposed, had been introduced by the patient herself to procure abortion.—*Ibid.* from *Gaz. Méd. de Paris*, Ap. 5, 1841.

54. *Delivery of four children at a Birth.* By M. Bourdois.—A woman who had been married for twenty-three months, was, on the seventh month of her pregnancy, delivered of a male child. Two hours afterwards a second male child was born, then a third, and after a few minutes a fourth, all of the male sex. A fresh discharge of *liquor amnii* took place before the delivery of the second child. There were, in fact, two deliveries, or a double pregnancy. One placenta had but one cord attached to it, the other had three cords. As it was

necessary to introduce the hand into the uterus for their extraction, they were found to be attached to opposite sides of the uterus. The two first born and the last were apparently of equal strength, and had the look of seven months' fœtuses. The third born was much less perfectly developed, and had more the appearance of a five months' fœtus. The third born lived but a few seconds, the three others only a few hours.—*Edin. Med. and Surg. Journ.* from *Journ. des Conn. Med. Chirurg.* July, 1840.

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55. *Reduction of a Prolapsus Uteri after sixteen years' continuance.*—M. DURANT records an interesting case of this in the Transactions of the Medical Society of Ghent. The wound protruding beyond the external parts, and covered by the inverted vagina, presented a globular tumour, round, and contracted at its origin into the form of a circular appendix. The *os uteri* was clear at its inferior part. The tumour at its middle part was fifteen and a half inches in circumference. Its external surface was brownish red, and covered with crusts and ulcerations. The long continuance of the affection had seriously injured the general health of the patient—she was pale and emaciated, and subject to sleeplessness, and cramps of the stomach.

M. Durant, before attempting reduction, kept the patient on light diet, and at rest in bed in a proper position; at the same time dressing the tumour with opiated emollient fomentations. Its surface speedily softened, and the crusts fell off, leaving superficial sores. After six days of this treatment, the operation was performed. It having been ascertained that the rectum and bladder were empty, the patient was placed in the position most advantageous for the entrance of the womb. M. D. then introduced the right forefinger into the os uteri, and burying it, pushed upwards in the axis of the tumour, which itself was placed in the axis of the true pelvis—then retaining the uterus in its place with the left hand, withdrew the finger, and, repeating this manipulation with gentleness, just as one turns the finger of a glove outside in, accomplished the reduction in less than half an hour. He then inserted into the vagina a sponge, cut into the form of a cylinder, and saturated with an emollient decoction, the thick end being highest up, and a cord attached to the other, for the purpose of removing it at pleasure. This sponge-pessary was retained in its place by means of compresses, and the T bandage. The patient did well, speedily gaining flesh and strength. During the after-treatment, which continued for about six weeks, emollient and astringent lotions were employed, and an ordinary-sized caoutchouc ring-shaped pessary was used, the saturated sponge and the injections being passed through its centre.—*Journ. de Méd. et de Chirurg. Prat.* Feb. 1841.

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56. *The Conditions which favour an excessive size of the Fœtus.*—Professor OSIANDER regards a too exclusive use for food, of articles composed of fecula, especially rye-bread, as contributing to produce a sort of fœtal hypertrophy; and he recommends to pregnant women who are obliged to live on such a diet, to abstain at regular times from food, and to take occasionally a saline purgative. The excessive development of the fœtus is one of the causes of difficult labour, and the Professor relates five cases of this nature.—*Zeitschrift für die gesammte Med.*

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57. *On softened, encysted Tubercles in the Substance of the Uterus, as a cause of difficult Labour.* By Professor OSIANDER of Gottingen.—The case here recorded differs from almost all others in which labour has been impeded by the pressure of tumours. Parturition was not impeded merely by their mechanical action, nor was the pelvic cavity contracted by their presence. They produced an injurious effect by paralyzing the action of the uterus and preventing the expansion of its fibres. The obstruction to labour thus caused was quite as great as if the pelvis had been contracted, aud delivery could be effected only by mutilating the child and employing the blunt hook.

The patient was a woman, forty-five years old, who had suffered from scrofula in her infancy. She was a person of unhealthy aspect, had already miscarried twice, but had never given birth to a living child. When seen by Professor Osiander, she had been tweuty-four hours in labour, her strength was much exhausted, and she was very low-spirited. The head of the child was felt to be very high up in the pelvis, and the membranes were still entire, though the os uteri was freely dilated.

After waiting for some hours, during part of which time the uterine action had been energetic, the head came somewhat lower down, and Professor Osiander ruptured the membranes. The head, however, remained above the brim of the pelvis, where it presented in the oblique diameter with the posterior fontanelle directed towards the right sacroiliac synchondrosis. An attempt to bring down the head with the forceps was unsuccessful, and it was next sought to deliver the patient by turning. The hand of the operator could touch the ribs, but it was found impossible to reach the feet, for a sort of stricture in the middle of the uterus rendered all attempts to carry the hand as far as the abdomen of the child, unavailing. Changing the position of the patient and placing her on her knees did not diminish the difficulties, for the contraction seemed to occupy alike all the walls of the uterus, and neither the right nor left hand could penetrate beyond it.

A second unsuccessful effort was made to deliver with the forceps; and then, after waiting for half an hour, Professor Osiander proceeded to perform craniotomy, and to extract the child by means of the blunt hook. This was not effected without great difficulty. It was necessary to introduce the hand, in order to remove the placenta, which was not adherent, but merely retained by an irregular contraction of the uterus. No serious hemorrhage followed delivery, but the uterus never contracted properly, and the abdomen continued much distended. The patient lay in a listless condition, making no complaint of pain, but with a quick pulse and tumid abdomen which were thought to indicate the propriety of venesection. No relief followed its employment, the patient was soon afterwards attacked with vomiting, and died on the third day after delivery.

On a post-mortem examination, no traces of peritonitis were found; but the whole right side of the abdomen was occupied by the enormously large uterus. The substance of that organ was nearly three fingers thick, beset with hard swellings like eggs, of a somewhat oval form, and filled with a yellow caseiform matter resembling pus, the liquid parts of which had been absorbed. These large tubercles, about nine or ten in number, were invested with a fibrous envelope. They projected on the posterior and external surface of the uterus, so as to render it uneven. Many smaller bodies of the bigness of cherries were imbedded in the uterine parenchyma, and on a section being made of them were seen to be made up of concentric fibres; thus resembling in structure the ordinary fleshy tubercles of the uterus. With the exception of partial ossification of the left ovary, the above was the only morbid appearance of moment, and to this state of the uterus the difficulty experienced in introducing the hand must be exclusively attributed.—*Brit. and For. Med. Rev.* Oct. 1841, from *Hannoversche Annalen*, v. Bd. 15 Ht.

58. *Immersion of children apparently Still-born in Cold Water.*—Dr. SCHOLER, assistant physician to the Berlin Lying-in Hospital, relates in the *Med. Zeitung.* (28 Ap. 1841), two cases in which this measure was successfully adopted, after all the ordinary means of resuscitating the child had failed.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

59. *Carbonic Acid.*—At the late meeting of the British Association, the secretary read a "Report on Poisons," by Dr. ROUPELL. After alluding to his former communications on the same subject, the author stated that he would in this report confine himself to some views on carbonic acid, an agent of the highest

interest from its injurious effects when applied in any way to the human frame, from its immediate connection with the function of respiration, and from the analogy of its effects to some serious maladies. The effects of carbonic acid, when not eliminated from the lungs, he stated were much overlooked, whilst the action of other substances less deleterious had been much attended to of late. This gas was eliminated, not only by the lungs, but also by the skin, by the serous and mucous surfaces, and that its quantity was much affected by many circumstances, more being given out by the lungs by day than by night, increasing by daybreak and diminishing at sunset; it is also increased by exercise and during digestion. It is lessened by depressing passions, by debilitating causes, by low diet, and injuries to the par vagum. The effects of the gas, when injected into the veins and arteries, were detailed in experiments. When two ounces (by measure) were injected into the saphena vein of a dog, the animal uttered cries of distress, became convulsed, lost its consciousness, and appeared to be dying. It felt, however, the stimulus of cold water, and recovered when thrown into the fresh air. When one ounce and a half were injected into the carotid artery, the animal became convulsed and foamed at the mouth; after forty minutes it seemed to recover, but again relapsed, lost all consciousness and power of movement, was quite insensible, and lay, as if dead, upon the floor. At intervals of a few minutes, it was seized with violent spasms. This alternation of stupor and convulsions continued for four hours, when the animal regained its senses and the power of its limbs, appearing to suffer no inconvenience. From these experiments and the well-known symptoms produced by its inhalation, the author concludes that the gas is intrinsically poisonous, in opposition to the opinion of M. Nysten and others, who deemed it negatively injurious, acting in the same manner as common air when injected into the blood-vessels, and by its exclusion when inhaled. The author alluded to those diseases, the leading symptoms of which resembled the effects of carbonic acid, and stated them to be such as prevented the proper arterialization of the blood, such as emphysema of the lungs and diseases of the heart; but the disease which most nearly resembled its action, and appeared its true prototype, he stated to be epilepsy, which was produced with all its terrors and depressing consequences by plunging an animal into this gas, which appears to act on the medulla oblongata, for it annihilates volition and consciousness, which have their seat in this portion of the nervous centres, and is also the source of respiratory movements, which the author conjectures may primarily and through life be excited by the stimulus of carbonic acid, and that the phenomena exhibited by narcotic poisons may depend on it. He has long laid it down as a rule, that opium is not to be exhibited, when the blood is not properly aerated or decarbonized; he also proved by direct experiment, that the quantity of carbonic acid given out by the lungs, is much increased when opium begins to exercise its characteristic effects on the system. In conclusion, Dr. Roupell stated, that the ideas expressed in this paper were stated with great deference to the meeting, and were advanced with the view of calling attention to certain interesting but obscure phenomena.—*Athenæum*, Aug. 24, 1841.

T. R. B.

60. *Detection of Meconic Acid.*—Dr. Percy, the author of a valuable prize Thesis on the Effects of Alcohol, proposes the following method, in order to determine the absence of *hydrosulphocyanic acid*, which, it is now known, will strike a red colour with the sesquichloride of iron, similar to what is caused by the meconic acid. As the former acid is not unfrequently present both in the stomach and in the saliva, it is very important to detect the presence of a cyanide.

"Transfer into a small test tube, the liquid which has furnished the deep red coloration on the addition of the sesquichloride, and which is therefore suspected of containing meconic acid; acidulate with sulphuric acid, and drop in a piece of pure zinc; then suspend in the tube a slip of paper impregnated with a salt of lead. If a sulphocyanide be present, the hydrosulphocyanic acid liberated by the sulphuric acid will immediately suffer decomposition by the nascent hydrogen evolved at the same time, and hydrosulphuric acid (sulphuretted hydrogen) will result, and instantly be rendered sensible by the blackening of the slip of paper."

Dr. Percy candidly admits that this test is not exclusively indicative of the hydrosulphocyanic acid, as it is possible that sulphur may exist in another form of combination, and be evolved by the above reagents. Still, if the result be as above described, we should not rely on the coloration as a test of meconic acid.—*Lancet*, July 31, 1841.

T. R. B.

61. *Rape.*—The law as to what constitutes this crime is now the same, both in Great Britain and in many of our own States. It is sufficient if penetration be proved. The following recent decisions may therefore be mentioned.

In *Regina* v. *Allen*, although it appears from evidence, that the party was disturbed immediately after penetration, and before the completion of his purpose, yet he must be found guilty of having committed the complete offence of rape. 9 *Carrington and Payne's Nisi Prius Reports*, p. 31.

In *Regina* v. *Jordan*, it was decided that a boy under fourteen years of age, cannot be convicted of feloniously, carnally knowing and abusing a girl under ten years of age, even although the surgeon swore that he had arrived at the full state of puberty. The judge also stated, that to constitute penetration, the parts of the male must be inserted in those of the female, but *as matter of law*, it is not essential that the hymen should be ruptured. *Ibid.* p. 118.

In *Regina* v. *Hughes*, the crime was fully proved to have been committed on a girl between eleven and twelve years old, but a surgeon who had examined her, stated his belief, that although penetration had taken place, yet the hymen, which in this case was at the usual distance up the vagina, was not ruptured. The jury found to this effect—that there had been penetration, but that the penetration had not proceeded to the rupture of the hymen. The case was reserved for the consideration of the judges, and eleven of them decided that the verdict was sufficient. *Ibid.* p. 752.

A curious anatomical question appears to have been considered on this trial, originating in testimony given a number of years ago in the case of *Rex* v. *Russen.* "Benjamin Russen was master of a charity school, and was charged with two forcible rapes on Anne Wayne, one of the girls of the said school, the first fact being just before, the other just after she attained her age of ten years. The child swore to a full proof in both respects, (proof of both penetration and emission being at that time essential,) and her testimony was corroborated by marks observed on her linen at the time, but she was deterred by the prisoner's threats from making any discovery till three or four months after the time. For the prisoner, it was proved by two surgeons, whose testimony was corroborated by four others who had examined the child, that the passage of the parts was so narrow that a finger could not be introduced, and that the membrane called the hymen and which crosses the vagina and *is an indubitable mark of virginity*, was perfectly whole and unbroken, so that she never could have been completely known by a man. *But as this membrane was admitted to be in some subjects an inch, in others an inch and a half* beyond the orifice of the vagina, Judge Ashurst, who tried the prisoner, left it to the jury to say whether any penetration was proved, for if there were any, however small, the rape was complete in law. The jury found him guilty and he received judgment of death, but before the time of execution, the matter being much discussed, the learned judge reported the case to the other judges for their opinions, whether his directions were proper, and upon a conference, it was unanimously agreed by all assembled that the direction of the judge was perfectly right. They held that in such cases, the least degree of penetration is sufficient, though it may not be attended with the deprivation of the marks of virginity. It was therefore properly left to the jury by the judge, and accordingly the prisoner was executed."

The editors, in commenting on this case, show by cases mentioned in the works of Dr. D. D. Davis and Dr. Paris, that the hymen is not an indubitable mark of virginity, since that membrane has been found entire during pregnancy, and remark, "with respect to the second proposition, there may be some doubt, as in all the preparations in the Museum of the Royal College of Surgeons, in which the hymen is shown, *it is not more than a quarter of an inch from the orifice of the vagina.*"

T. R. B.

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62. *Electricity in Poisoning by Opium.*—Several cases are related, in which this proved an important agent in the recovery of individuals. Mr. Erichson states, that a patient who, after the use of the stomach-pump, was treated with strong coffee, ammonia, the cold affusion and constant agitation for three hours, and became more and more comatose, was completely aroused by passing a few shocks of an electro-magnetic apparatus through her head. After persevering in these about half an hour, she was able to answer questions with comparative facility, and to walk a little. Nervous symptoms succeeded, with costiveness and a scanty secretion of urine, which detained her several days in the hospital, but she was discharged well.

In another instance, where the comatose state was also becoming alarming, the same application was used with immediate success. A large portion of the poison had, however, been previously discharged by vomiting with sulphate of zinc, and the stomach-pump.

We need all these agents in the treatment of poisoning by opium. The cold affusion, though very useful, may, as Mr. Erichson remarks, be continued too long, and thus increase, by its depressing effects, the weakness of the system. Constant agitation is also indispensable, in many cases, yet this, as Dr. C. J. B. Williams observes, increases the forced demand for respiration on organs already weakened. The interposition of electricity may assist the good effects of each, and at the same time render their extreme use unnecessary.

A clinical remark of the last named physician deserves to be added. In persons who have recovered from the effects of opium, there is a frequent tendency to local congestions or inflammations. This is best obviated by calomel purgatives.—*Lond. Med. Gaz.* May 28, 1841, from *Lancet*, July 31, 1841. T. R. B.

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63. *Feigned Hysteria.*—Some of the shapes assumed by this pathological proteus are hideous and disgusting. Paralysis of the muscular fibres of the bladder, or spasm of its sphincters, sometimes really occurs; sometimes it is only aped, in hysteria. It is a common trick with these patients to pretend that they labour under *retention of urine*, and that, although the bladder is full, they cannot make water. The daily introduction of the catheter by a dresser or apprentice appears to gratify their morbid or prurient feelings. Sometimes, no doubt, the difficulty is real, but it is oftener feigned or exaggerated. I have again and again known it disappear, upon the patient's being left, without pity, to her own resources. But girls have been known to drink their urine, in order to conceal the fact of their having been obliged and able to void it. The state of mind evinced by many of these hysterical young persons, is such as to entitle them to our deepest commiseration. The deceptive appearances displayed in the bodily functions and feelings find their counterpart in the mental. The patients are deceitful, perverse and obstinate, practising or attempting to practice the most aimless and unnatural impositions. They will produce fragments of common gravel, and assert that these were voided with the urine, or they will secrete cinders and stones in the vagina and pretend to be suffering under some calculous disease. A young woman contrived, in one of our hospitals, to make the surgeons believe that she had *stone in the bladder*, and she actually submitted to be placed on the operating table, and to be tied up in the posture for lithotomy, before a theatre full of students, and then the imposture was detected. Sometimes they simulate *suppression of urine*, and after swallowing what they have passed, vomit it up again, to induce the belief that the secretion has taken place through a new and unnatural channel.

It is impossible, I say, not to pity the unhappy victims of this wretched disorder, when their morbid propensities drive them to such acts as these. I mention them, because you must expect to meet with such cases, and because, while you take care not to express your suspicions prematurely, or on light evidence, you should be on your guard against the mortification of being deceived, by the false signals held out, into active and ill directed measures of treatment.—*Dr. Watson's Lectures on the Practice of Medicine*, in *Lond. Med. Gaz.*, June 11, 1841.

T. R. B.

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64. *Infanticide.*—In the case of *Regina* v. *Reeves* (9 Carrington and Payne's Reports) it was decided, that if a child be killed, after it has been completely delivered, but is still connected with the mother by means of the umbilical cord, such killing is murder.

T. R. B.

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65. *Poisoning by Alcohol.*—Dr. Percy terminates his valuable experimental Essay (*Edinburgh Prize Theses*) with the following conclusions.

"*First.* In reference to the principal object of the investigation, we may conclude that, although no *direct* evidence has been advanced in support of the statement, of Dr. Ogston and others concerning the presence of alcohol in the *ventricles* of the brain, after poisoning by alcoholic liquors, yet the circumstance of alcohol being separated from the brains of dogs, and the human brain, may be adduced as favourable to these statements. It must not, however, be forgotten, that I obtained two results, which appear to be at variance with this conclusion; for in the two instances in which I found an appreciable quantity of liquid effused into the ventricles, I was unable to detect any trace of alcohol in this liquid, although a sensible quantity was separated from the substance of the brains. I have already remarked, that I do not consider these results of much weight, as the quantity of effusion in both cases was, comparatively speaking, so inconsiderable, that the analyses can scarcely be considered satisfactory. Besides, it is necessary to observe that effusion, after fatal intoxication, has frequently been discovered in the ventricles of the human brain;* although there are only one or two cases recorded, in which this effusion is reported to have furnished any indication of the presence of alcohol. Hence also, the *two* results cannot justly be urged as an objection to the preceding conclusion.

"A remark may here be appropriately introduced respecting the situation in which the alcohol may exist in the brain. That, to a certain extent, it is diffused through the substance of the brain; and that it is not all contained in the cerebral vessels, will, I think, appear from the following circumstance:—namely, that, although I have subjected to analysis a much greater quantity of blood than can possibly be present within the cranium, yet I have, in general, been enabled to procure a much larger proportion of alcohol from the brain, than from all this quantity of blood. Indeed, it would almost seem that a kind of affinity existed between alcohol and the cerebral matter.

"*Second.* The rapidity with which alcohol may, under *favourable circumstances*, be absorbed from the stomach and conveyed to the brain is remarkable.

"*Third.* That alcohol may be detected in the blood, the urine, the bile, and the liver. It may be separated with great facility from the bile and liver; and this circumstance may probably serve to explain the frequency of hepatic disease in habitual drunkards. I must repeat, that I have only once succeeded in separating alcohol from the urine of dogs, although I have several times subjected this secretion to analysis. In the instance in which I succeeded, it will be observed that the bladder was fully distended with limpid urine, (vide Exp. ii;) and, therefore, that I had the advantage of the most favourable circumstances.

"Müller enumerates alcohol amongst the 'matters which, when taken into the stomach, cannot afterwards be detected in the urine.'† I am, however, happy to introduce an analysis of the human urine, in which I have satisfactorily detected the presence of alcohol.

"As this result is at variance with the statement of very accurate observers of the present day, Berzelius and Müller, it is incumbent upon me to relate every circumstance minutely. I obtained (in Edinburgh) the urine of a man (a grave-digger, who is guilty of habitual intoxication) who was in a state of intoxication; he had taken in all, as nearly as I could learn, about a bottle of whiskey. The urine was clear, and of a pale straw-colour. I subjected ℥v. to distillation over an Argand lamp, and drew over ʒiij. of perfectly colourless and transparent liquid, having a peculiar odour, very like that of sweet wort. The product was poured into a small matrass, containing an adequate quantity of subcarbonate of potass, and again distilled. The first drops which came over were examined, and found not to be combustible. I then continued the distillation, and drew over ʒj., which was put into a test tube, containing subcarbonate of potass; instantly, on agitation, a perfectly clear and colourless supernatant stratum appeared, which dissolved camphor, and burned with a blue flame. This examination was repeated in the presence of Dr. Trail.

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* Edinburgh Med. and Surg. Journal, vol. xl, p. 290.

† Elements of Physiology, (translation by Baly), p. 589.

"Magendie, I believe, was the first physiologist who detected alcohol in the blood;* many attempts, however, have been previously made, but without success. Dr. Trotter, in his work on Drunkenness, maintained the opinion, that 'much of the (alcoholic) liquor enters the circulation, and gives there an additional stimulus.'† But the reviewer of this work in the *Edinburgh Medical and Surgical Journal*, endeavoured to refute this opinion, and urged, 'that neither the blood, nor any of the excretions, when examined, give any indication of the presence of alcohol, or intoxicating substance.'‡

"To conclude the present dissertation, I cannot select a more appropriate subject, than the consideration of the *direct* modes, in which alcohol may, when introduced into the stomach in sufficient quantity, exert its intoxicating effects. Without fear of contradiction, I may remark, that there is no subject in physiology, which has given rise to more controversy, and which, even at present, appears to be involved in greater obscurity, than the *modus operandi* of narcotic poisons. Whilst some physiologists maintain, that the peculiar and deleterious effect of these poisons upon the nervous system, is entirely to be attributed to an impression upon the extremities of the nerves of the stomach, or other organs, to which they may be applied, others advocate an equally exclusive doctrine, and hold, that the narcotic first enters the circulation, and then produces an impression upon the extremities of the nerves, which, it is assumed, are distributed to the inner coat of the vessels; whilst others again, amongst whom I may mention Müller, are led to the conclusion, that all narcotic poisons, not excepting even concentrated prussic acid, the action of which is instantaneous, exert their deadly influence directly upon 'the central organ of the nervous system,' by actual transference to this organ.§ I shall not enter upon an elaborate discussion of the various arguments which may be adduced both in favour of, and at variance with, each of these theories. I shall merely endeavour to show, that the narcotic effects of alcohol cannot in all cases be satisfactorily explained by adopting exclusively, either the theory of an impression upon the extremities of the nerves, or that of direct action upon the central organ of the nervous system.

"If it be maintained that the narcotic effects of alcohol, in other words, *the cerebral derangement which alcohol produces*, depends exclusively upon a peculiar impression upon the extremities of the nerves, we should certainly expect that this cerebral derangement would, in every instance, almost, if not instantaneously, succeed the exhibition of alcohol, especially when in large quantity, and in a concentrated form. On a careful review, however, of the experiments detailed, it will be observed, that generally an interval of several minutes elapsed before the slightest manifestation of cerebral derangement was afforded. Hence it is inferred, that in some, or rather in the greater number of cases, absorption is required for the development of the narcotic effects of alcohol; and that the central organ of the nervous system is then directly affected. And in support of this inference, may also be adduced the experience of Dr. Christison, who states, that in some experiments performed by Dr. Coindet and himself, the alcohol 'appeared to act not so swiftly, but that absorption might easily have taken place before its operation began.'*

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* Dictionnaire de Médecine, tom. xi, p. 489.

† Edinburgh Med. and Surg. Journal, vol. i, p. 57.

‡ Vol. i, p. 57.

§ Elements of Physiology, p. 247.

"In some of the experiments, on the other hand, total loss of sensibility and voluntary power so instantaneously followed the introduction of the poison into the stomach, that, as I have before remarked, we cannot, notwithstanding the rapidity with which we have seen that alcohol may be conveyed from the stomach to the brain, conceive that absorption to a sufficient extent could possibly have been instantaneously effected. Hence, although I acknowledge the evidence is not absolutely conclusive, yet little doubt, I think, can be entertained, that alcohol may produce its narcotic effects, and even induce a fatal termination, without being absorbed. The question then arises, whether these effects depend upon an impression upon the extremities of the nerves? Unfortunately, it would be extremely difficult, if not impracticable, to determine the solution by direct experiment. Yet, unless we respond in the affirmative, it is impossible to explain how the brain and nervous system in general should be so instantaneously affected. That an impression may be directly transmitted from the stomach to the brain, is proved by the remarkable sympathy which is known to exist between these two organs; for on no other principle than that of nervous communication can this sympathy be explained.† A *slight* blow on the stomach may cause immediate death, and, as far as we can conceive, in no other manner than by producing an impression which is transmitted to the whole nervous system through the medium of the gastric nerves. Now, is it unreasonable to suppose, that alcohol, which, be it remembered, is a powerful narcotico-acrid poison, may, when introduced into the stomach in sufficient quantity, cause death in a similar manner?

"It has, I am aware, been objected, that the circumstance of the symptoms of intoxication being, in some instances, almost instantly abated by vomiting, is incompatible with the idea that alcohol may act by absorption directly upon the 'central organ of the nervous system.' But, independently of the facts that alcohol may be detected in the brain and blood, I may answer,—*firstly*, that in dogs I have never (although I have watched with great attention) seen such immediate abatement even after repeated and violent vomiting, as is generally represented to take place in the human subject;—*secondly*, that even admitting the correctness of the observation upon which the objection is founded, the very act of vomiting may probably be a sufficient stimulus to account for the subsequent relief; and this is supported by the current opinion, that vomiting is much more efficacious than complete evacuation by means of the stomach-pump;—*thirdly*, that I recently witnessed a case of profound intoxication in a man, in which complete evacuation by the stomach-pump was not attended by any immediate abatement of the symptoms. Indeed, the intoxication suffered no diminution for two or three hours afterwards, during which time the breath continued strongly alcoholic.

"Again;—it may be objected that alcohol produces an equally powerful effect, when the pneumo-gastric nerves are divided; but the objection is at once removed, when it is remembered that the sympathetic nerves remain uninjured."—*Percy's Prize Thesis*, pp. 102–112. *Lond. and Edin. Monthly Journ. of Med. Sci.* Oct. 1841.

66. *Poisoning by the Vapours of Antimony.*—M. Lohmeier, of Schonebeck, has recorded in the Nos. of *Casper's Wochenschrift* for April and May 1840, the history of four patients who were frequently exposed to the vapours of antimony,

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* Christison on Poisons, 3d edit. p. 843.

† "I might also mention the well-known fact, that death is frequently caused by wounds and extensive burns, of which the effects can on no other principle than that of nervous impression and communication, be conceived to be commensurate with the fatal result."

in an establishment where there were prepared on the large scale tartrate of antimony, butter and glass of antimony, and other antimonial preparations, during the preparation of which were disengaged abundant vapours of antimonious and antimonic acid, and chloride of antimony.

The four patients presented the following symptoms. Pain in the head; lancinating pain along the edge of the ribs and in the back; difficult respiration with mucous and sibilous rattles over the chest; difficult expectoration of tenacious mucus; sleeplessness, anorexia, diarrhœa, profuse perspirations, and general weakness; dysuria with a mucous discharge, causing a burning feeling in the urethra; flaccidity of the penis, with loss of the sexual appetite, and even complete impotence; pain in the testicles, and atrophy of these organs, as well as of the penis; pustules over different parts of the body, but especially on the thighs and scrotum.

M. Lohmeier observes, that in none of the recorded cases of poisoning by antimony has the peculiar affection of this medicine on the sexual organs been observed, nor yet its effect in exciting a peculiar cutaneous eruption; but it is remarked that the homœopathists have noticed this on the generative organs, and that its preparations are habitually administered to animals by agriculturists to hasten their fattening, when it probably acts by diminishing the sexual appetite; and lastly, that it appears to have been used by monks in the monasteries with the view of diminishing their sexual propensities, and hence its name of antimony, from *moine*, a monk.

The curative means used by M. Lohmeier were the free use of antiphlogistics in the first place, and afterwards the internal administration of opium, tannin, and quinine, with lotions of the same applied to the parts externally affected, and milk diet. If the functions of the sexual organs did not return naturally as the other affections abated, he recommended the use of tincture of cantharides united with opiates, and lotions of cold water to the scrotum.—*B. and F. Med. Rev.* Oct. 1840, and *Edin. Med. and Surg Journ.* Jan. 1841.

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67. *On the best mode of Treating Cases of Poisoning by Arsenic.* By M. Orfila.—Rasori and Giacomini some time ago advanced, that the ordinary antiphlogistic treatment usually practised in cases of poisoning by arsenic was decidedly hurtful, and that, from their experiments on 47 dogs, a stimulant and tonic plan of treatment was that best fitted to effect a cure. With the view of ascertaining the truth of this statement, M. Orfila, in the presence of a commission of the Royal Academy of Medicine, and of many of his friends, experimented on 157 dogs; and the following is a short abstract of his extended inquiry:

1. Twelve dogs had their œsophagus tied, and the ligature left on for thirty hours. When removed at the end of this period, the animals ate and drank freely, and seemed no ways injured; and the wound in the neck healed in a few days. This experiment was for the purpose of ascertaining what amount of suffering was to be attributed to the ligature in the subsequent experiments, where the œsophagus was tied to prevent the poison being vomited.

2. To three dogs were administered the stimulant and tonic mixture said by the Italian physicians to be so successful in the treatment of arsenical poisoning; but they were found in every case to produce death in a few hours, the animals exhibiting all the symptoms of intoxication, and also occasionally acute internal pains. The mixture was composed of eight ounces of beef-tea, two ounces of brandy, and the same quantity of wine.

3. Arsenic in powder was introduced into the subcutaneous cellular tissue of the inside of the thighs of thirty-four dogs, and the following was the result:—Two grains was the quantity used for each dog; and the first five being left without any treatment died in from thirty to forty hours. Ten dogs were treated by the Italian tonic plan, and all died. Four were allowed lukewarm water, but also died, having passed very little urine. Seven dogs were bled about six or seven hours after the introduction of the poison; but they all died. Six dogs had diuretic medicines administered to them, composed of six pounds of water, one pound of white wine, and one ounce of saltpetre, with the occasional addi-

tion of a little Seltzer water, and all recovered. They passed large quantities of urine, which contained arsenic, as was ascertained by analysing it in the apparatus of Marsh. Four other dogs, treated by the saltpetre water died; but they scarcely passed any urine.

4. Forty-one dogs were made to swallow arsenic in powder, in quantities varying from three and a-half to ten and a-half grains, with the following results:—Four dogs whose œsophagus were not tied recovered without any treatment, having expelled the poison by free vomiting. Four dogs whose œsophagus were tied died in a longer or shorter time. Four dogs who were allowed to vomit recovered, although subjected to the stimulant treatment. A ligature was kept round the œsophagus of seven dogs for a variable length of time, from two to thirty hours, and the animals were subjected to the Italian stimulant treatment; four only died. Of those which recovered, two vomited after the removal of the ligature, which in one was after two hours and three-quarters, and in the others after five hours and a-half, but all passed an abundant quantity of urine. Four dogs had quinine administered to them in a decoction of cinchona bark; but their œsophagus were tied, and they all died. No urine, or only very little, was passed by them. Nine dogs who were subjected to the aqueous treatment, and were allowed to vomit, all recovered. They all vomited and passed urine freely. Of nine dogs who were bled, seven recovered. In four of them the œsophagus was tied for three, four, and five hours, and blood-letting was the only remedy used. The other three were allowed to vomit.

5. In this series of experiments the arsenic was dissolved in water, and then introduced into the stomach, the same quantities being used as in the former series of experiments. Seven dogs, three of whom had the œsophagus tied for three hours, died in a few hours, though several of them vomited. Eighteen dogs, who had each about four grains of arsenic administered to them, and had the œsophagus tied for from forty minutes to two hours, all died in spite of the Italian stimulant treatment. One large dog vomited a part of the solution, and recovered; it had also been subjected to the stimulant treatment. Eight dogs, which vomited freely a few minutes after taking the poison, and were subjected to the aqueous treatment, recovered. They all passed large quantities of urine. Another dog, which did not vomit for one hour, died, though it was similarly treated. Two others, which had the œsophagus tied, the one for three-quarters of an hour, the other for fifty minutes, died. Thirteen dogs were bled, but only two recovered. Nine dogs were bled, and had also hot water given to them, and seven recovered. The two which died had the œsophagus tied, and vomiting of course, prevented for fifty minutes.

6. This series of experiments was undertaken with the view of ascertaining whether the exciting a copious diuresis would have the effect of obviating a fatal result, when other poisonous agents were administered. Tartrate of antimony was the first poison selected: and M. Orfila found, that one grain and a-half introduced into the cellular substance of the thigh produced death in four dogs in the space of from seventeen to thirty-six hours. Five dogs were similarly poisoned, but had diuretic drinks administered to them, and four recovered. They passed large quantities of urine, which was ascertained to contain antimony.—The dog which died had passed no urine.

7. Opium was the poison next experimented on; and from fifteen to ninety grains of its watery extract were administered to twelve dogs, in some of the cases being applied to the cellular tissue of the thigh, at other times introduced into the stomach. But these dogs, though subjected to the diuretic treatment, passed no urine, so that he was unable to ascertain whether this poison, like the metallic salts, could be removed from the system by the action of the kidneys of these animals. He has, however, been able to ascertain that opium is passed off with the urine, having several times detected morphia in that fluid; and he thinks, however, that in man a diuretic plan of treatment might with propriety be adopted, as one means of freeing the system from the poison, diuresis being more easily induced in him, when labouring under the effects of opium, than it is in the dog.

The conclusions which M. Orfila draws from the above experiments are so very obvious, that it is unnecessary to detail them here. In poisoning with arsenic or other metallic salts, after free vomiting, the great object is to aid the expulsion of the poison from the system by exciting full and free diuresis. The Italian stimulant plan appears to be worse than useless.—*Edinburgh Medical and Surg. Journ.*, from *Bulletin de l'Academie Royal de Medecine*, Nov. 15, 1841.

T. R. B.

HYGIENE.

68. *On the Injuries to Health occasioned by breathing Impure Air in close apartments.*—The *Lancet* for June 19th, 1841, contains some remarks on this subject by Dr. Elmore, which we conceive to be of so much importance, that we shall transfer the greater part of them to our pages, and invite to them especial attention. The entire neglect, for the most part, of all means for ventilation in our buildings, public as well as private, and the imperfect means adopted for the purpose in the few instances in which it has attracted some little consideration, is truly remarkable when it is considered that a constant and due regulated supply of atmospheric air is essential to the sustention and prolongation of life and to mental enjoyment. Formerly our dwellings in Philadelphia were warmed (if so it might be called) by wood fires, the greater part of the heat from which was carried up the huge chimneys, and the currents of air thus necessarily created, were supplied by the crevices in the doors and windows. The consequence was, a general and just complaint by those who collected in front of the fire that their backs and feet were freezing whilst their faces were burning.

At present warming houses by means of heated air is becoming prevalent, and whilst ingenuity has been taxed for the means of effecting this with most economy, i. e. of heating the air to the highest temperature, the *quality* of this air and the means by which it is to pass off when rendered more impure than when received seems not to have obtained a thought. The air is heated by *iron* stoves in chambers of masonry. These chambers are too small, and the air is conveyed through the building by flues also too small. Hence it is necessary in cold weather that the stove should be kept red hot in order to heat the air sufficiently to warm the house, and thus the air is rendered almost unfit for respiration when introduced into the rooms. No means being provided by which this air shall regularly pass off, it becomes confined, and much discomfort and many ill effects result from breathing this air, constantly becoming more and more impure. But Dr. Elmore has discussed this so fully, that we shall not dilate further on the subject, but content ourselves with quoting his observations.

A free admission of air, and a constant supply and free circulation of this element, "is as necessary for sustaining life as a given quantity for the combustion of the fuel we require to warm our apartments: our builders, nevertheless, only provide for the latter, as if the former, although the more important, was of minor consideration; or, that they conceived the chimney-draught sufficient for both purposes, when in reality it does not answer that for which it is principally intended; as by far the greater portion of the heat generated in our open fire-places is carried up the chimney, by sharp currents of air from occasional openings of doors, or such crevices as it may force its way through; being, moreover, frequently productive of serious bodily injuries, particularly to those of delicate frames; while it cannot be sufficient for the purposes of wholesome ventilation, this air being colder than that already in the room, is consequently of greater specific gravity, and must form a lower stratum, not unfrequently felt by those placed round the fire, suffering from an undue proportion of heat at one side and of cold at the other.

"It should also be borne in mind, that the openings of our fire-places being seldom more than three or four feet from the floor, the upper stratum of air which we breathe is neither removed or purified by this under-current, and must, from being breathed over and over again, be productive of most prejudicial effects, and that the contamination of this atmosphere is considerably augmented at night by the combustion of lights. It has been ascertained that the quantity of air breathed by an ordinary-sized person is about two thousand cubic feet per hour; and that two mould candles consume as much of the oxygen of this air as a human being; and that the nitrogen and carbonic acid gas which remain are peculiarly inimical to animal life, and that when carried up by the currents occasioned by combustion and respiration, they form an upper stratum where they remain, and must be repeatedly inspired before they make their escape into the chimney, the only ventilating flue with which our houses are provided.

"It should also be observed, that the heat thus generated is in proportion to the quantity of oxygen abstracted from the atmosphere, which enters into combination with the carburetted hydrogen of the flame of candles, coal-gas, oil, or other inflammable matter, from which light is produced. That every cubic foot of carburetted hydrogen consumed unites, on an average, with two cubic feet of oxygen (that portion of the atmosphere required to support animal life), and that the product of this combustion is about two and a half inches of water and one of carbonic acid gas, which, when inhaled in its pure state, proves instantly fatal; and the greater the proportion we inhale, in addition to the vapours evolved from the lungs and skin, the more pernicious the effect.

"Supposing, for example, that the perfect lighting of an ordinary-sized apartment requires fifteen cubic feet of carburetted hydrogen per hour, this would form about a pint and a half of water, and fifteen cubic feet of carbonic acid gas; for whenever carburetted hydrogen gas is burned with oxygen, or atmospheric air, these are the products of the combustion, whether the carburetted hydrogen is obtained from wax, tallow, oil, or coal. If, therefore, this lighting continues in an unventilated apartment for seven hours, one gallon of water is produced, the greater part of which will be deposited on the walls, windows, furniture, polished metal, or other cold surfaces, with which it comes in contact; and to some articles of this nature it is known to prove highly prejudicial, in addition to the injury to health occasioned by an increased quantity of moisture, mixed with the air we breathe. As one of the principal functions performed by this air for the preservation of health, is to carry off with it a considerable quantity of vapour, in order to prevent its undue accumulation in the lungs, it is, therefore, evident, that after it has been already so loaded it cannot properly perform these functions, and that consumption and other complaints are thus frequently induced.

"The prejudicial effects of carbonic acid gas (which is the same as the choke-damp of mines) as well as the nitrogen of the air, which is set free by the abstraction of the oxygen (and amounts in quantity to four times that of the oxygen), are well known, and ought by all possible means to be provided against. This has been attended to within the last few years in our public hospitals, and the mortality in consequence considerably decreased; and likewise in several of our manufactories and public establishments, where the diseases generated by the number of persons congregated in such establishments have been proportionably diminished. In the House of Commons, also, where hundreds of members, with hundreds of candles burning at night, tended so much to vitiate the atmosphere, important improvements in lighting, as well as ventilation, have been recently made; but in our domestic establishments little or no attention has been paid to this important subject, and the foundation of a variety of diseases must be the result, particularly from the foul air breathed at balls, or other crowded assemblies.

"The confinement of air in our churches and places of public worship must also be highly prejudicial, as we are frequently exposed to an atmosphere, on entering one of these edifices in the summer months, ten or fifteen degrees below that of the external air, independent of the stagnant state in which it has been allowed to remain during a whole week, often vitiated, in a greater degree, by the gaseous matter evolved from human remains; and even in private houses much inconvenience is experienced from the stagnant state of the atmosphere in close and gloomy weather, as the entire basis of ventilation depends on the possibility of producing a constant circulation as well as supply of this element. Close stoves are also objectionable when made of iron, and heated to a certain temperature, as oxide of iron is produced by the powerful attraction of that metal for oxygen, and the formation of ammoniacal gas by the mixture of the nitrogen which remains, with hydrogen, acting on our bodies and olfactory nerves.

"But if stoves were constructed of masonry throughout, as in many other countries, or of fire-tiles, or porcelain plates, imbedded in mortar, with well-regulated flues, they would be far preferable to open fire-places; this substitution of imperfect conductors of heat being not only consistent with the soundest principles of economy in the preservation of heat, and its more uniform distribution through apartments, but more conducive to health than bringing the air in contact with iron stoves or pipes. Our desire, however, for polished metals in almost every department of our domestic appendages, united to the interests of the furnishing ironmongers, to whom these matters are usually left, must operate, in no small degree, in determining the prevailing taste for this commodity. Porcelain stoves may, nevertheless, be made sufficiently ornamental for those who prefer health to fashion; and when apartments are provided with well-regulated apertures and flues through their ceilings into the adjoining chimneys, to carry off the air vitiated by respiration and combustion, a sufficient degree of heat may be obtained with a sufficient supply of that element, without which it is impossible to maintain health.

"The healthy appearance of those who pass the greater part of their time in the open air, sufficiently indicate its advantages. Armies are also well known to have greater numbers on the sick list when well-housed, and what is considered comfortably settled in quarters, than when exposed in a campaign to the vicissitudes of the seasons for weeks and months, without any other covering than the canopy of heaven, or occasionally of a tent or hut, or the shade of a tree. These facts ought to satisfy us that we should admit the air as freely as possible, and provide, at the same time, for its escape through the ceilings of our apartments at all seasons of the year, as the temporary and often imaginary inconvenience of a little cold, when compared with the decided disadvantages of breathing impure air, is by far the lesser evil."

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69. *Is the Gelatine of Bones Alimentary?*—The commission, of whose report I am about to give a summary, consisted of MM. Thénard, D'Arcet, Dumas, Flourens, Breschet, Serres, and Magendie. The experiments were made by these *savans* collectively, and the report drawn up by M. Magendie. Before giving an account of this document, it is proper to state, that the employment of the gelatine of bones as an aliment, is a problem which has been keenly contested, both by scientific men, and by political economists. The first person who attracted notice to this subject was Papin, the French physician, who invented the digester which bears his name. He softened the bones by the aid of steam, and in this way obtained from them an abundant jelly. At the time of the great French revolution, when every new idea was hailed with enthusiasm, some went so far as to say that gelatine might supersede flesh as the food of the community. In the instructions published by order of the French government, by Cadet-de-Vaux, we read the following astounding assertions: "*Un os est une tablette de bouillon formée par la nature. Une livre d'os donne autant de bouillon que six livres de viande. Un étui, un manche de couteau, une douzaine de boutons d'os sont autant de bouillons volés à l'indigence.*"* This hyperbolical language was subsequently sanctioned by the Academy of Medicine of Paris. In 1814, when this learned body was consulted on the subject, they officially declared that gelatine was both nutritious, and easy of digestion. La Charité, St. Louis, the Hôtel Dieu, and other public establishments, soon afterwards had steam ap-

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* A bone is a soup-cake formed by nature! A pound of bones yields as much soup as six pounds of butcher meat! A bone case, a knife handle, or a dozen of knobs, are just so many plates of soup robbed from the poor!!

paratus constructed on the plan of M. D'Arcet, for the production of gelatinous water; but this apparatus did not realize the high expectations which had been formed regarding it. The solution of gelatine had a disagreeable smell, repugnant both to patients and convalescents. Moreover, it contained less nutritious matter than meat-broth, and consequently soon ceased to be employed in these establishments.

About 1831, various persons made experiments upon man and the lower animals, to test the nutritive properties of bone jelly. MM. Donné and Gannal arrived at the conclusion that gelatine is not nutritive. M. Milne Edwards, on the other hand, was less decided, but regarded this substance as insufficient of itself for aliment.

Such, then, was the state of the question, when submitted to a commission of the Academy of Sciences, who, for the last ten years, have been occupied in its investigation. The experiments were made at the College of France upon dogs, and other domestic animals, the habitual food of which most nearly resembles that of the human species. .

When dogs had given to them exclusively pure gelatine, they tasted it once or twice, and then refused it. Spiced gelatine, such as that introduced into hams, and which is generally considered very palatable, was administered to other dogs. At first they ate of it with avidity, but afterwards disgust was manifest, and on the twentieth day they all died from inanition. Comparative experiments were made, by subjecting dogs to total abstinence, except water for drink, when it was found that they likewise died of hunger on the twentieth day. Hence it appears that gelatine, whether pure or mixed with seasoning, is not an aliment.

But then, may not gelatine be a most important article of food, when associated with other alimentary substances? Mixed with the juice of meat, or with the juice of meat and bread together, does it not constitute an economical and nutritious article of diet? The contrary has been proved by experiment. This mixture, when in the proportion of one half of gelatine, speedily excites an insurmountable disgust; and nutrition is incomplete. The animals experimented upon lose flesh, and weight; whereas those of the same age and size, fed with an equal quantity of meat-broth, without any addition of gelatine, enjoy good health, and become fat.

Analogous experiments show, that the chondrine, the tendons, the cartilages, the hide, crude or tanned, are not, when used as exclusive articles of food, sufficient for aliment, beyond a certain time. The extended researches, of which we have now presented a summary, corroborate the statements of Donné and Gannal, and clearly establish that gelatine is little if at all nutritious. The question remains to be answered,—Do these negative properties belong exclusively to this substance? The commission of the Academy, with a view to elucidate this point, made experiments with albumen, fibrin, fat, &c., and the results show that none of these substances, taken separately, or united with others, afford sufficient nutriment to animals, whereas the same quantity of crude flesh, though of inferior quality, afforded abundant nourishment to other dogs. From 150 to 300 grammes of flesh were found to contain more nutriment than 1000 grammes of fibrin, supplemented by some hundred grammes of fibrin and albumen! What then is the peculiar principle which renders flesh so excellent an aliment? Do the odorous and sapid matters, the salts, the trace of iron which we find in it, the fatty matters, or the lactic acid, cause this, in spite of the small proportions in which they exist? These are interesting questions—but how are they to be solved? Only by separating from flesh a principle which, united with albumen, gelatine, and fibrin, would constitute an aliment sufficient for carnivorous animals. Although this question cannot be answered, it has now been proved, that in furnishing to the stomach these matters alone or mixed with too small a quantity of the active principle of flesh, we only obtain an insufficient aliment.

The following are the conclusions with which M. Magendie terminates the report of the commission:

1st, It is impossible by any known process to extract from bones an aliment, which singly, or mixed with other substances, can supply the place of flesh.

2d, Gelatine, albumen, and fibrin, taken singly, afford nutrition to animals only for a short time, and in an incomplete manner. In general, these substances, when pure, soon excite a disgust so insurmountable, that the animals prefer to die rather than to partake of them.

3d, These same principles, when artificially united, are partaken of with more resignation, and for a greater length of time; but they do not exert a better influence on nutrition, for the animals which eat of them in large quantities, at last die with symptoms of complete inanition.

4th, Muscle, in which gelatine, albumen, and fibrin are naturally united and associated with other matters, such as fat, various salts, &c., suffices even in small quantities for the purposes of nutrition.

5th, Crude bones have the same advantages, but the quantity consumed in twenty-four hours requires to be much greater than when flesh is used.

6th, All kinds of preparations, such as the decoction in water, and by the action of muriatic acid, and especially the transformation into gelatine, diminish the nutritious properties of bone, and even seem in certain cases to cause them entirely to disappear.

7th, The commission, however, does not choose at present to pronounce upon the employment of gelatine as an article of human aliment, when associated with other aliments, being aware that direct experiments can alone settle this question. They are at present actively occupied with this investigation, the results of which will be brought forward in the second and last part of this report.

8th, Gluten suffices of itself for complete and prolonged nutrition.

9th, Adipose substances, taken as exclusive articles of aliment, sustain life during a certain time, but produce an imperfect and irregular nutrition. Fat accumulates in all the tissues to such an extent, as to exist in the state of oleïne, and stearine, or even in the state of pure stearine.

The last part of the report was read on the 2d of August, and was then ordered to be printed in the Compte Rendu.—*Lond. and Ed. Med. & Surg. Journ.* Sept. 1841.

MISCELLANEOUS.

70. *Crooked Noses Straightened.* By Prof. Dieffenbach.—A slight degree of divergence from the perpendicular is common enough in the nose; and any considerable departure from the straight line gives a very absurd and repulsive expression to the countenance. Two cases of this kind presented themselves in young people about twenty years of age, almost at the same time. In the one the deformity had been produced by a fall, in the other it was congenital. In the one the nose was bent to the right, in the other to the left; the extremity in the former case pointed to the right cheek, in the latter to the left, and the nostrils were situated, not side by side, but one over the other. With a delicate curved knife, Dieffenbach transfixed the side of the dorsum of the nose, at the point of junction between the bone and the cartilage, and separated the two along the line of union, dividing the cartilage under the skin. The knife was then withdrawn and passed on to the other side of the dorsum nasi, so as to separate the other ala, and at the same time divide the septum narium. The nose now, almost of itself, assumed its natural direction. By means of plugs of lint placed within the nostrils, and a couple of strips of sticking plaster, it was readily brought into, and maintained in the perpendicular. The success of the operation was complete in both cases. The traces of it can scarcely be known.

Neither inflammatory swelling nor suppuration occurred. The cure was perfect within a very few days.—*Lond. and Edin. Monthly Journ. of Med. Sci.* Nov. 1841, from *Casper's Wochenschrift*, Sept. 18, 1841.

[We have placed the above article under the present head instead of under that of surgery, because we entertain strong doubts as to its being entitled to the latter distinction, and we give it merely as a subject of intelligence, to inform our readers what is doing abroad.]

71. *Death of Homœopathy in its Native Land.*—"At the time of my former visit I was anxious to see the Homœopathic hospital, of which I had previously heard, Leipsic being the head-quarters of this doctrine. I expected to have found at least forty or fifty beds filled with patients; but was rather surprised to find that the building (which is a small house in the suburbs) only contained eight, and even of these all but two or three were unoccupied. At my last visit to Leipsic, I understood that matters were going on badly with homœopathy, which indeed is now comparatively little heard of in Germany and France, and only required to be understood by the public for its absurdity to be apparent, though there will always be credulous individuals who are to be caught by any novelty, when presented under a specious appearance, and backed by an unintelligible name. During its whole progress it never was sanctioned by any individual of eminence in the profession, and was principally taken up as a means of acquiring wealth or a livelihood by persons who had never been previously heard of, or who were known as having failed to acquire practice by the honourable exercise of their profession; by whom every means were taken to puff it into notice, and to keep public attention directed to it; such as repeated histories of cures, the establishment of dispensaries, of which, I believe, the only one that remains is the above-mentioned at Leipsic, even if it be still in existence, for a few months before my arrival the house-physician having become convinced, during a residence of some time in the dispensary, of the nullity and danger of homœopathy, gave up his appointment, and published an exposition of the system pursued, with an account of cases, which clearly shows—what had long been evident to the bulk of the profession and the public,—that the so-called cures were recoveries from ordinary aliments by the efforts of nature, which were frequently a long time under treatment, whereas, by a proper medication and attention at the outset, they might probably have been removed in a few days, and that many of the more serious cases got worse instead of better, for the want of active treatment. It must not be supposed that the homœopathists always adhere to the principles of the doctrine. It has not unfrequently happened that persons who attributed their recovery to homœopathy were treated allopathically without their being aware of it. In fact, one practitioner in Leipsic, a professed homœopathist, candidly acknowledged that he pursued both plans of treatment, and was accustomed to ask his patients by which method they would be treated, as both were equally good."—*Lee's Memoranda on France, Italy, and Germany*, &c.

72. *Scarlatina.*—The *Jamaica Standard* of Nov. 24, gives a sad account of the ravages of this epidemic in the town of Kingston. It says,

"There are very few families in Kingston who are not more or less visited by this scourge. Indeed, such is the situation in some families that they are entirely indebted to the kindness of friends and neighbours for the little assistance rendered them during this awful visitation, there being not one in some families to help the other. Whence arose this disease it is hard to say. Some suppose it to have been among the females and children of the 60th regiment, while others are of opinion that it first made its appearance among some of the European immigrants. Be this as it may, one fact is certain, and that is —the scarlatina prevails over the whole island, and is sweeping off the young and old, and rich and poor, with awful fearfulness.

"At first we fell in with those who expressed the opinion that this contagion was only confined to the extremely poor, and persons who were indifferent to having their houses carefully cleaned and ventilated; but experience has convinced us that neither rank nor station, age nor sex, are exempted from this awful visitation. Our streets are daily filled with funeral processions, and many unfortunate parents only get rid of one full grown child, to prepare for the funeral ceremonies of another on the succeeding morning."